

Exhibit B

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

CHARLENE DZIELAK, et al., :
:
:
Plaintiffs, : CIVIL ACTION NO.
: 2:12-cv-00089-KM-SCM
vs. :
:
:
WHIRLPOOL CORPORATION, :
:
Defendants. :

Videotaped deposition of DR. RAMAMIRTHAM
SUKUMAR, taken by and before Lisa Forlano, CCR, CRR,
RMR, at the offices of Bursor & Fisher, P.A.,
888 Seventh Avenue, New York, New York, on March 17,
2016, commencing at 9:14 a.m.

Job No. CS2236904

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1 VIDEO OPERATOR: Good morning. We are
2 now on the record. Please note that the
3 microphones are sensitive and may pick up
4 whispering and private conversations. Please
5 turn off all cellphones or place them away
6 from the microphones, as they can interfere
7 with the deposition audio. Recording will
8 continue until all parties agree to go off the
9 record.

10 My name is Jim Roberts, representing
11 Veritext Corporate Services in Livingston, New
12 Jersey.

13 Today's date is March 17, 2016. The
14 time is approximately 9:14 a.m.

15 The deposition is being held at Bursor
16 & Fisher, located at 888 Seventh Avenue, New
17 York City, New York, and it is being taken by
18 counsel for the Defendants. The caption of
19 the case is Charlene Dzielak, et al. versus
20 Whirlpool Corporation, et al.

21 The case is held in the US District
22 Court, District of New Jersey, Case No.
23 2:12-cv-00089.

24 The name of the witness is
25 Dr. Ramamirtham Sukumar.

1 Counsel will please state their
2 appearances for the record.

3 MS. McLAUGHLIN: Allison McLaughlin for
4 the Defendants.

5 MR. MARCHESE: Happy St. Patrick's Day,
6 everyone. My name is Joseph Marchese of
7 Bursor & Fisher, joined today by my colleague,
8 Neal Deckant, for the Plaintiffs.

9 VIDEO OPERATOR: Our court reporter,
10 Lisa Forlano, also of Veritext, will please
11 swear in the witness.

12 RAMAMIRTHAM SUKUMAR, Ph.D., having been
13 duly sworn, was examined and testified as
14 follows:

15 BY MS. McLAUGHLIN:

16 Q Good morning, Dr. Sukumar.

17 A Good morning.

18 Q What is your understanding of the
19 allegations in this case?

20 A I understand that there's a class
21 against Maytag in the Centennial clothes washing
22 machine model numbers -- I don't remember the exact
23 model numbers -- C6 and C7, and the use of the
24 ENERGY STAR logo, which is falsely used in these
25 models.

1 Q In what way is the ENERGY STAR logo
2 falsely used, in your understanding?

3 A My understanding is that the ENERGY
4 STAR logo claim was falsely used so the machines
5 were not certified by the Government as being ENERGY
6 STAR logo efficient.

7 Q And do you know how many models are
8 issued in this case?

9 A I understand that there are three
10 models. I don't remember the exact model numbers.
11 They're in my report.

12 Q And do you know what years that the
13 washer models were manufactured?

14 A I don't know exactly when they were
15 manufactured, but I do know that retail sales for
16 these models happened somewhere in the 2009 to 2012
17 timeframe.

18 Q And do you know -- your understanding
19 is most of them were sold in the 2009 to 2010
20 timeframe?

21 A Could you repeat that question, please?

22 Q Sure. Is it your understanding that
23 the majority of these washers were sold from 2009 to
24 2010?

25 A Well, it's my understanding that they

1 were sold even as late as 2012.

2 Q And do you know, is the proposed class
3 for people throughout the country who purchased
4 these machines or in certain states?

5 A It is my understanding that it is for
6 seven states, like Texas, California, New Jersey.

7 Q Do you know the other states?

8 A Indiana. I don't remember all of them.
9 But it's again, Ohio, Virginia.

10 Q And what did you do to familiarize
11 yourself with the facts of this case?

12 A I read the Complaint. That gave me a
13 good understanding for the facts of the case.

14 Q And what else?

15 A You know, that was primarily the core
16 input into designing the study, and obviously
17 counsel had a conversation about what my assignment
18 was, and, you know, that allowed me to think through
19 and understand what I needed to look at out here.

20 Q So the basis for your survey was
21 discussions with counsel and the Complaint; is that
22 the sum total of what you considered in devising
23 your survey?

24 MR. MARCHESE: Objection to form.

25 THE WITNESS: No. Let me explain. For

1 the survey itself there's a lot more
2 information that was taken into account. So,
3 for example, retail sales data from Fry's,
4 Home Depot, Lowe's, this was taken into
5 consideration. My own assessment and
6 evaluation, based on looking at retailers'
7 websites as well as making a store trip,
8 looking at the 2015 Consumer Reports guide,
9 and a few other things that are described in
10 my report.

11 BY MS. McLAUGHLIN:

12 Q But would you say that your
13 understanding of the facts in this case is limited
14 to the Complaint and discussions with counsel?

15 MR. MARCHESE: Objection to form.

16 THE WITNESS: Well, my assignment
17 started with looking at the Complaint and the
18 conversation, and then my own expert opinion
19 and judgment in terms of how I should conduct
20 the survey led me to making the necessary
21 decisions and choices that I made in designing
22 this whole survey.

23 BY MS. McLAUGHLIN:

24 Q Do you know why the washers allegedly
25 didn't meet the ENERGY STAR requirements?

1 A I'm not an expert at, you know, the
2 mechanics and mechanical engineering frameworks that
3 go into the washing machine, so I wouldn't answer
4 that question.

5 Q Well, is it your understanding that the
6 Maytag Centennial washers at issue should not have
7 displayed the ENERGY STAR logo because they used too
8 much energy?

9 MR. MARCHESE: Objection.

10 THE WITNESS: Again, let me explain. I
11 mean, you know, should they have done it or
12 should they have not done it is not the
13 question that I answered in my report and is
14 not something that technically as -- I'm
15 qualified to provide an opinion.

16 BY MS. McLAUGHLIN:

17 Q Sure. And I understand that you're not
18 being asked to provide an opinion as to whether they
19 should have displayed the logo, but is it your
20 understanding that they shouldn't have --
21 Plaintiff's allegations are that they shouldn't have
22 displayed the logo because they used too much energy
23 and water. I'm just trying to understand what you
24 understand the allegations, why they did not meet
25 the certification.

1 MR. MARCHESE: Objection to form.

2 What is the question? Could you repeat
3 it?

4 BY MS. McLAUGHLIN:

5 Q Sure. Let me repeat that. I'm just
6 trying to understand your understandings as to why
7 the washers did not meet Energy Star standards, why
8 they shouldn't have displayed the logo.

9 A So, you know, I'll give you my same
10 answer that it was just really I'm not a technical
11 expert. I really don't want to get into the details
12 of that. My assignment was specifically about
13 understanding the price premium, if any, associated
14 with the presence of the Energy Star logo and what
15 the class would, in an aggregate, pay for it. One
16 of the technical specifications that allow it to be,
17 you know, ENERGY STAR or not, I don't think I'm
18 qualified to answer.

19 Q So you don't know if the Plaintiffs
20 this case claim that the washers used too much
21 energy and water than they are supposed to use? You
22 don't understand if that's what's at issue here?

23 A Well, I do understand that the ENERGY
24 STAR logo has certain specifications related to
25 electricity and water, but the details and the

1 specifications around it and the standards around
2 it, I wouldn't want to answer about that.

3 Q So you don't know how much -- by how
4 much the Maytag Centennial washers supposedly failed
5 to meet the ENERGY STAR requirements?

6 MR. MARCHESE: Objection, lacks
7 foundation.

8 THE WITNESS: It really would be
9 outside my expertise to provide answers to
10 that question.

11 BY MS. McLAUGHLIN:

12 Q So you don't know in they possibly
13 failed by 1 percent or 50 percent of what the
14 Government requires to meet ENERGY STAR standards?

15 A It does not change any of my opinions
16 in my report, and it is not necessary as an input
17 for me to consider, because again, you know, my
18 assignment was very specific.

19 Q But you do not know?

20 MR. MARCHESE: Objection to form.

21 THE WITNESS: I don't want to really
22 answer that question. It's not in my
23 expertise to answer that.

24 BY MS. McLAUGHLIN:

25 Q But do you understand I'm not asking

1 your expertise in whether they meet or do not meet,
2 that's clearly not your area. I'm just wondering if
3 you know by how much the Plaintiffs claim that they
4 fail to meet the ENERGY STAR requirements? Just if
5 you know.

6 A I don't know.

7 Q Okay. Thank you.

8 Do you know how many models of
9 top-loading washing machines were available for sale
10 in 2009 and 2010?

11 MR. MARCHESE: Objection, compound.

12 THE WITNESS: I don't know the exact
13 number. And that is not something that is
14 relevant to the scope of my assignment here.

15 BY MS. McLAUGHLIN:

16 Q I understand. I'm not asking if it's
17 relevant, I'm asking if you know. And the answer is
18 no, you do not know.

19 A Yes, it's not something I know and it's
20 not something that impacts my specific analysis.

21 Q Do you know how many top-loading
22 washers were made by Whirlpool in the 2009-2010 time
23 period?

24 A I'm sure there a quite a few, but I
25 don't know the exact number, and like I said, it's

1 not something that impacts my assignment or my
2 understanding of my assignment.

3 Q Is it important for your assignment to
4 know what washers are comparable to the Maytag
5 Centennial washers sold in 2009-2010?

6 A It is not -- for my assignment
7 effectively, when you look at conjoint analysis, or
8 the entire area of multi-attribute preference
9 measurement, we do control for other attributes like
10 whether it's top loaded or front loaded. The focus
11 here is largely on the price premium, if any, for
12 the presence of the ENERGY STAR logo as compared to
13 not having the ENERGY STAR logo on it.

14 Q Would you agree that it's not important
15 to your survey what other comparable washers were
16 available in the marketplace in 2009-2010?

17 MR. MARCHESE: Objection to form.

18 THE WITNESS: So my survey does take
19 into account the other brands that would have
20 been considered by the class when they were
21 looking to make a purchase. I also looked at
22 retail sales data from Lowe's and Fry's and
23 other places. But these are all baked in, in
24 terms of what the competition is and what the
25 competitive prices are of the entire

1 demand-side consideration, supply-side
2 considerations, are baked into the price
3 premium calculation. It's not necessary that
4 I need to understand exactly the number of
5 models that are present or not present.

6 BY MS. McLAUGHLIN:

7 Q I'm sorry if I didn't understand. Did
8 you say "baked in"?

9 A These are all taken into consideration.

10 Q Okay. Thank you.

11 So is it important for your
12 consideration what a washer that is comparable to
13 the Maytag Centennial washers are, what would be the
14 comparable features to the washers at issue?

15 A Could you repeat that question?

16 Q Sure. Is it important to your survey
17 to understand what other -- what comparable washers
18 were available in 2009 and 2010 in terms of features
19 in those washers and whether there is a comparable
20 washer to the Maytag Centennial machines?

21 A So when you look at -- I'm going to
22 focus on the part where you asked about a number of
23 different features and what they are and what needs
24 to be taken into account and when. I did some focus
25 groups with consumers to understand what features

1 they would consider, what models they had. I've
2 looked at retail sales data and I've looked at
3 Consumer Reports in terms of what features exist,
4 and all of those have been taken into account in a
5 conjoint survey, and at the end of the day the
6 conjoint survey is done and price premium is
7 calculated for the presence of the ENERGY STAR logo
8 as compared to not being present is to control for
9 some of those other features. And so the answer to
10 your question is yes, I mean, these things were
11 taken into account.

12 Q Well, what did you do to learn about
13 what washers were available in the marketplace in
14 2009 and 2010?

15 A As I mentioned, the retail sales data
16 is one example. And --

17 Q Did that retail sales data --

18 MR. MARCHESE: Hold on, were you
19 finished with your answer? Were you finished
20 with your answer?

21 THE WITNESS: No, I was just going to
22 explain.

23 MR. MARCHESE: Can you just let the
24 witness finish with his answer before you ask
25 another question, please?

1 THE WITNESS: So, you know, what I did
2 is I looked at retail sales data. I also
3 looked at Consumer Reports to understand what
4 are the attributes that I need to consider in
5 the multi-attribute preference conjoint survey
6 approach that was used.

7 BY MS. McLAUGHLIN:

8 Q Okay. Let's take the sales data that
9 you looked at. Tell me what the sales data was
10 specifically that you looked at. What did it
11 encompass?

12 A I don't have a copy of my report in
13 front of me, but the details are in there. It's
14 retail sales data from 2009 to 2012, if I recall
15 correctly. For retail sales data at Fry's, Home
16 Depot, Lowe's, those are all part of the -- part of
17 my report I've kind of stated some of those in
18 details.

19 Q Please help me understand. Was the
20 retail sales data for the Maytag Centennial washers
21 or did it encompass all the different washing
22 machines available in the market from 2009 to 2012
23 at these three retailers?

24 A I don't recall exactly. I don't have
25 the data right now in front of me but it's in there.

1 It was all taken into consideration when the entire
2 survey was built, along with looking at Consumer
3 Reports, along with, you know, the store visits that
4 I did, as well as online surveys. Took into account
5 a whole area of attributes that are necessary for me
6 to incorporate into my conjoint survey.

7 Q So you can't recall, sitting here
8 today, if that retail sales data included washers by
9 Whirlpool's competitors?

10 A I can't recall that right now. I'm
11 just trying to think. It's there in the details of
12 my -- in the report.

13 Q And you said, you looked at Consumer
14 Reports. Was that for 2015 or was that historical
15 Consumer Reports from 2009-2010 time period?

16 A I looked at 2015. Again, as part of
17 the conjoint survey that I was doing in 2015, I took
18 into account a wide area of attributes, a large
19 number of these attributes into the multi-attribute
20 preference model, the survey approach itself, in
21 order to understand, you know, what are the things
22 that consumers would consider when they look to make
23 a purchase of a clothes washing machine.

24 And, again, as the way the conjoint
25 survey works is, in trying to understand the price

1 premium for the ENERGY STAR logo versus not having
2 the ENERGY STAR logo they're essentially ensuring
3 that all the other attributes that might go into the
4 purchase decision are held as a constant in the
5 process.

6 Q So would you agree that you do not look
7 at Consumer Reports from 2009, 2010, is that
8 essentially what you're saying?

9 A Yeah, my expert opinion, I did not need
10 to go back to 2008 or 2009 to look at the Consumer
11 Reports then. It was enough for me to do the focus
12 groups that I did with consumers in 2015 as well as
13 a look at the Consumer Reports that I used in my
14 evaluation.

15 Q You did not think it was important to
16 look at what washing machine attributes and features
17 were available in 2009 versus available in 2015?

18 MR. MARCHESE: Objection to form.

19 THE WITNESS: Again, in my expert
20 opinion, and having done many of these
21 studies, 2015 is when I did the survey, so it
22 was important for me to make sure that I have
23 a clear understanding of a wide number of
24 attributes that consumers would consider, and
25 2009 attributes would probably be very similar

1 to what you have in 2015, but not something
2 that I really needed to consider.

3 BY MS. McLAUGHLIN:

4 Q So the answer is no, you did not think
5 it was important to look at what features were
6 available in 2009, 2010?

7 MR. MARCHESE: Objection to form.

8 BY MS. McLAUGHLIN:

9 Q Just a simple yes or no. No, you did
10 not think it was important; yes, you thought it was
11 important?

12 MR. MARCHESE: Objection to form.

13 THE WITNESS: No, I didn't think it was
14 important, and I didn't need it for my
15 consumer survey.

16 BY MS. McLAUGHLIN:

17 Q Did you consider the market prices of
18 any Maytag brand top-loading machine available in
19 2009 and 2010 that wasn't ENERGY STAR?

20 A Well, if you look at all the retail
21 sales data, there's a clear understanding for what
22 the market forces are and what the prices are and so
23 on, and if you look at what I did in the conjoint
24 survey there's a wide range of prices that were
25 especially in the conjoint survey that include

1 washing machines that would perhaps not have the
2 ENERGY STAR logo.

3 Q But I thought you said that your -- you
4 didn't know what the retail sales data was that you
5 looked at so you don't know if it included
6 non-ENERGY STAR washers.

7 A Sitting here at this time, I don't
8 remember. But clearly there's a wide range of
9 information that I considered. You know, the retail
10 sales data. I considered shopping at, you know -- I
11 took a trip down to Home Depot and Lowe's. I looked
12 at some of their promotion materials that are put in
13 the newspapers in terms of various models of clothes
14 washing machines. All of that became a complete
15 input into designing the conjoint survey and testing
16 a wide array of prices that would include machines
17 of different kind.

18 Q I don't think you quite answered my
19 question. Did you consider the market price of
20 non-ENERGY STAR Maytag washers that were available
21 in the 2009 to 2010 time period?

22 A The answer is yes. And the way I
23 considered it is, as I described, you now, a wide
24 array. So the conjoint survey itself tests price
25 points that are as low as \$200 for ENERGY STAR --

1 for clothes washing machines that don't have the
2 ENERGY STAR logo on it.

3 Q But I'm not asking about what your
4 survey found, I'm asking about what the market price
5 was. What did these -- what did non-ENERGY STAR
6 washers sell for back in 2009? Did you look at that
7 data?

8 A Again, I don't have all the data right
9 now, I can't recall and tell you exactly what was
10 done, but I can tell you this, that in designing the
11 inputs, which is really what I needed to do in my
12 assignment, I took a whole wide range of inputs that
13 went into it, ranging from looking at the sales
14 data, the Complaint, and then looking at the 2015
15 Consumer Reports, looking at retailer websites,
16 making a trip, doing a, you know, a set of focus
17 groups. All of those provided me with a guidance
18 for what price points I needed to test, and that's
19 really what inputs I needed.

20 Q Do you know if there were any similar
21 non-ENERGY STAR top-loading washers available during
22 the class period?

23 MR. MARCHESE: Objection to form.

24 BY MS. McLAUGHLIN:

25 Q During the 2009 to 2010 time period.

1 MR. MARCHESE: Objection to form.

2 THE WITNESS: Can you repeat that
3 question for me?

4 BY MS. McLAUGHLIN:

5 Q Yeah. Do you know if there are any
6 similar non-ENERGY STAR top-loading washers that
7 were available during the 2009 to 2010 time period?

8 MR. MARCHESE: Objection to form, vague
9 as to the word "similar."

10 THE WITNESS: I don't remember it, and
11 it doesn't really -- it's not important for my
12 conjoint survey, which essentially takes into
13 account, as I said, a whole wide range of
14 price points and controls.

15 BY MS. McLAUGHLIN:

16 Q Right. I understand you don't think
17 it's relevant. I'm asking if you know of any
18 similar non-ENERGY STAR top-loading washers. And I
19 think you said you don't know. Is that correct?

20 A I don't remember the exact, you know,
21 details. I don't know would be the answer. But as
22 I said, again, it's not relevant to the designing of
23 the survey, because I would have taken into account
24 all of the other information, like retail sales data
25 and so on, in designing the conjoint survey.

1 Q Do you know if there were any other
2 ENERGY STAR top-loading washing machines available
3 in the marketplace in 2009 and 2010?

4 A I'm sure there were. And again, you
5 know, I don't know if I'm repeating myself here, but
6 it's not relevant to --

7 Q You don't have to keep telling me it's
8 not relevant. I understand that. I'm asking if you
9 know. It's a more yes, no, I don't know, as opposed
10 to -- I understand you don't think it's relevant. I
11 think we've established that. I just want to know
12 if you know of any other ENERGY STAR top-loading
13 washing machines available in the marketplace in
14 2009 - 2010?

15 A I don't remember the exact details now.

16 Q Thank you. Was it important to your
17 survey to learn about the competitive models
18 available in this time period, other than to the
19 values -- the attributes in your survey, is it
20 important for you to understand what else is on the
21 marketplace -- in the marketplace in 2009?

22 MR. MARCHESE: Objection to form.

23 THE WITNESS: Well, in designing the
24 survey and looking at, you know, what the
25 competitive brands I wanted to consider in the

1 conjoint survey I did take into account, you
2 know, a wide area of information. So to that
3 extent, yes, it is important for me to make
4 sure that I'm including things, the main
5 attributes, the most important attributes that
6 are reflective of the choice. Now, there may
7 be others, smaller ones that may not be
8 relevant, and don't necessary -- all of the
9 attributes don't necessarily have to be
10 included. So the key attributes for its
11 consideration I took into account a whole wide
12 area of information.

13 BY MS. McLAUGHLIN:

14 Q What are the three attributes, in your
15 opinion?

16 A I designed the key attributes. There
17 were 19 of them, including the ENERGY STAR logo, its
18 presence or absence. I don't remember the exact
19 list of these attributes. They're in my report.
20 There's clearly brand and price that were taken into
21 consideration, into the conjoint survey itself.
22 These attributes were designed by putting in a lot
23 of thought, looking at the retail sales data,
24 looking at the, you know, the focus groups that were
25 done, as well as the shopping trips and the retailer

1 shopping trips that I did. So there was a lot of
2 thought put into designing these attributes and
3 levels that are in my report.

4 Q Is it your opinion that the 19
5 attributes in your report and in your survey are all
6 key attributes of the Maytag Centennial washer?

7 MR. MARCHESE: Objection to form.

8 THE WITNESS: The 19 attributes are
9 important based on all of the inputs that I
10 just described in understanding what are
11 consumers' preferences for a clothes washing
12 machine. And, you know, based on that we have
13 designed the conjoint survey and gone through
14 the whole assignment.

15 BY MS. McLAUGHLIN:

16 Q You used the word "key" before, and I'm
17 just trying to understand if you think it's your
18 opinion that all 19 are key to the Maytag Centennial
19 washing machine.

20 A Well, the way conjoint surveys are
21 designed is you look at a number of different inputs
22 in trying to understand what are the attributes that
23 are important in making the purchase of a clothes
24 washing machine. So if you look at the list of
25 attributes, there may be some that are very

1 pertinent to the Maytag Centennial machines, there
2 may be some that are not. The whole idea here is in
3 trying to understand if there's any price premium
4 for the ENERGY STAR logo, you want to take into
5 account other attributes and you want to control for
6 those other attributes while understanding the price
7 premium.

8 Q And what are the attributes that you
9 believe are very pertinent to the Maytag Centennial
10 washing machines, based on your research in this
11 case?

12 A That specific information is not
13 relevant or pertinent to the design of my survey and
14 so, you know, I don't have an opinion that I want to
15 give you today on exactly what attributes, but
16 clearly one attribute we know, which is very
17 important is the ENERGY STAR logo. And that is very
18 clear both in terms of looking at my report and some
19 of the analysis that was done to see that ENERGY
20 STAR logo is an important attribute in driving
21 purchase decisions for the class as an aggregate,
22 and also it led to a price premium that, you know,
23 for the Maytag Centennial machines, that was clearly
24 outlined in my report, the \$180.39 price premium of
25 the ENERGY STAR logo.

1 Q So I think in that very long response
2 you said that you don't know whether you don't
3 know -- aside from the ENERGY STAR logo, you don't
4 know what are the very important attributes of the
5 Maytag Centennial. Is that your opinion?

6 MR. MARCHESE: Objection.

7 BY MS. McLAUGHLIN:

8 Q Aside from the ENERGY STAR. I
9 understand that.

10 A So the exact attribute that is
11 important for the buyers of Maytag Centennial
12 washing machines, specific attributes that may be
13 important might vary by different class members. So
14 to give a blanket answer as to what is important to
15 Maytag Centennial machines is not appropriate. It's
16 not correct.

17 Q You don't know or you won't opine on
18 it?

19 A Again, let me explain what I'm saying.

20 Q I understand what you're saying. I'm
21 just asking a simple question.

22 MR. MARCHESE: Hold on.

23 MS. McLAUGHLIN: He's not answering my
24 question. I'm asking a very simple question,
25 does he have an opinion on what the key

1 attributes other than ENERGY STAR are. It's a
2 simple yes-or-no question. If you don't have
3 an opinion, that is fine.

4 MR. MARCHESE: But he's providing an
5 answer and you're cutting him off. You're
6 cutting him off.

7 MS. McLAUGHLIN: I don't think that is
8 the case, but if we could let him continue,
9 please.

10 MR. MARCHESE: Were you finished your
11 answer?

12 THE WITNESS: No, I wasn't finished.

13 MR. MARCHESE: So you're cutting him
14 off. Please don't do that.

15 THE WITNESS: So, you know, again, what
16 I'm getting at is my answer for what are the
17 attributes that are important or not important
18 is not relevant. What's relevant here is the
19 class members were surveyed and how they made
20 their preferences and their choices, and there
21 may be some that may be important for some
22 class members and there would be others that
23 would be important to other class members.
24 The one thing that -- part of the assignment
25 that clearly stands out is the ENERGY STAR

1 logo, its presence or absence is important,
2 and its in the report in terms of how
3 important it is in the aggregate to class
4 members. And we also see that the class
5 members, in an aggregate, are willing to pay a
6 price premium for that ENERGY STAR logo.

7 Now, beyond that, your question doesn't
8 have a yes or a no answer. Your question --
9 it will actually depend on each class member,
10 so there may be a whole variety of attributes
11 across those 19 attributes that we tested that
12 may be important to some and may be important
13 to others.

14 BY MS. McLAUGHLIN:

15 Q So whether an attribute is important to
16 a class member depends on that individual class
17 member; is that what you're saying?

18 A It is important to them individually
19 and in the aggregate as well. And the data that is
20 there speaks to it. But my opinion about when --
21 when you asked me my opinion, I don't own a Maytag
22 Centennial machine, so I'm not in a position to give
23 you an opinion on that. However, definitively on
24 the basis of the conjoint survey, there clearly is a
25 preference for the class, the aggregate for the

1 ENERGY STAR logo, so that would be an example of one
2 attribute that we know is important to the class
3 members.

4 Q And did you not con -- did you not
5 analyze your survey to see what other attributes
6 were considered important? I know you did it for
7 the ENERGY STAR. Did you look at for any of the
8 other attributes?

9 A The report talks about the other
10 attributes and how important these are, but my
11 assignment was focused on looking at the price
12 premium, if any, for the ENERGY STAR logo, whether
13 it was present or absent; and the report is focused
14 on that analysis.

15 Q So the answer is no?

16 A The answer would not be no. The answer
17 is yes. The details of the report give you the
18 attribute importances for the class members who were
19 surveyed on the aggregate across all the 19
20 attributes. And there's an exhibit in the appendix,
21 which I don't have the exact numbers in front of me,
22 but if you go back to the exhibit you'll see what
23 attributes were important to the class members in
24 making a decision to purchase a washing machine, a
25 clothes washing machine.

1 MS. McLAUGHLIN: Could you read my
2 question back. I don't believe he answered my
3 question.

4 (At which time the following question
5 was read back by the reporter:

6 "Question: Did you not analyze your
7 survey to see what other attributes were
8 considered important? I know you did it for
9 the Energy Star. Did you look at for any of
10 the other attributes?"

11 MR. MARCHESE: Objection, asked and
12 answered. He just answered that exact
13 question.

14 BY MS. McLAUGHLIN:

15 Q I don't think you answered whether you
16 analyzed what other attributes were important to
17 Maytag -- to your survey population. You said you
18 analyzed it for the ENERGY STAR. I'm asking you,
19 did you analyze what attributes were important,
20 based on your survey data, for the other 18
21 attributes?

22 MR. MARCHESE: Objection to form.

23 You can answer that, if you understand
24 what was even being asked.

25 THE WITNESS: I answered it yes because

1 it's in the report. There is an exhibit in
2 the report that clearly outlines the
3 importance of the other 18 attributes to the
4 class members that were surveyed.

5 BY MS. McLAUGHLIN:

6 Q And so you analyzed the data for the
7 other 18 attributes?

8 A That's correct. It's in the report.

9 MS. McLAUGHLIN: Let's mark your
10 report.

11 (Declaration and Expert Report of
12 Dr. R. Sukumar, dated December 28, 2015, was
13 marked RS-1 for identification.)

14 BY MS. McLAUGHLIN:

15 Q The court reporter is handing you what
16 has been marked as RS Exhibit 1. Take a moment to
17 flip through this document and then tell me what it
18 is.

19 A This is my expert report on the
20 conjoint survey that I conducted without the
21 appendix and the details of the appendix -- the
22 exhibits, I mean.

23 Q Please turn to page 4 and look at the
24 assignment section. In this section it says you've
25 been asked by counsel for the Plaintiffs to estimate

1 the price premium, if any, attributable to the
2 ENERGY STAR logo on Maytag Centennial washing
3 machines -- and then it lists the model numbers --
4 through the use of a conjoint analysis.

5 Were you specifically asked to conduct
6 a conjoint analysis?

7 A Well, I was asked to do the -- estimate
8 the price premium, if any. Now, I've done hundreds
9 of conjoint analysis, and as an expert in conjoint
10 analysis, I chose the conjoint analysis technique as
11 being the right one to do this in estimating the
12 price premium.

13 Q So you are given discretion to choose
14 which analysis to do or survey method to use to see
15 if there is a price premium; is that correct?

16 A Well, I understand that counsel did
17 want me to look at conjoint analysis as one of the
18 techniques. In being an expert, in my opinion, it
19 was the most appropriate technique to use to
20 understand price premium. It's being used in many
21 commercial work, as well as in other cases, and it
22 is the right technique to use to understand price
23 premium.

24 Q Why is it the right technique to use to
25 understand price premium?

1 A You know, if you think about what we're
2 looking at here, we're looking to understand how
3 consumers in the class make purchase decisions and
4 how they trade off to the whole broad class of
5 multi-attribute preference models, also referred to
6 as conjoint or tradeoff analyses. It's all about
7 understanding how consumers place emphasis on
8 certain attributes and what is the value they place.
9 So you have to estimate the value they place on an
10 attribute, let us say like ENERGY STAR logo and how
11 does that compare to the value of the dollar in the
12 price? So effectively, what they're looking to
13 understand here is what portion of the price would
14 you allocate as being value from having the ENERGY
15 STAR logo versus not having the ENERGY STAR logo?

16 This is routinely done as part of
17 conjoint analysis, and so it's again -- I've been
18 trained in it. I have a Ph.D. in marketing and
19 statistics and this is what I taught all my life in
20 my current role as a CEO of Optimal Strategix Group.
21 I've done many studies, including for household
22 appliances and products, their conjoint analysis is
23 used for such kind of understanding of a price
24 premium.

25 Q What exactly is a conjoint analysis?

1 A So the whole class -- so conjoint
2 analysis is a survey technique. It is used to
3 understand the -- you know, multi-attribute or
4 multi-attribute preference that consumers or
5 customers, so it can also be used in a
6 business-to-business context place on -- so the
7 value they place on attributes and specific levels
8 of these attributes and the trade off, there's a
9 whole broad class of tradeoff techniques that are
10 used, could take into account -- would take into
11 account price, as well as a number of different
12 attributes; so how do people make tradeoffs, how do
13 they make -- how do consumers place value on certain
14 attributes as compared to other attributes. That's
15 really what conjoint surveys are designed to do.

16 Q Do you believe that a conjoint analysis
17 is the only method available to identify a price
18 premium in this case?

19 MR. MARCHESE: Objection to form.

20 THE WITNESS: There are other methods,
21 but conjoint, you know, is a method that is
22 used extensively. There are other
23 claims-related work in the legal setting,
24 also, that I've used conjoint as an approach.
25 I'm an expert in conjoint. I know how to do

1 this. I've done this for many years.

2 BY MS. McLAUGHLIN:

3 Q What other methods are able to identify
4 a price premium?

5 A Well, I understand that in this case,
6 you know, contingency valuation method is used by
7 Dr. J. Michael Dennis. There could be other
8 approaches. Again, my focus is on conjoint, that's
9 what I'm expert on and this is really what I do for
10 a living.

11 Q Would you have been qualified to do a
12 contingent valuation survey?

13 A I don't believe I would be -- I'm not
14 an expert in that area for me to be qualified. But
15 when it comes to conjoint surveys, not only in
16 academic that does that, written papers on that, but
17 also, you know, in the last eight years of being CEO
18 for Optimal Strategix Group, my firm has done many
19 of these conjoint analysis surveys.

20 Q Have you ever conducted a contingent
21 valuation to identify a price premium associated
22 with a good the marketplace?

23 MR. MARCHESE: Can you just read that
24 back? I'm sorry.

25 (At which time the following question

1 was read back by the reporter:

2 "Question: Have you ever conducted a
3 conjoint analysis to determine a price premium
4 to determine the price in the marketplace?")

5 MS. McLAUGHLIN: I think I said
6 contingent valuation, or at least I attempted
7 to.

8 MR. MARCHESE: Do you want to withdraw
9 the question and ask a new one?

10 MS. McLAUGHLIN: Yes, let's withdraw
11 that.

12 BY MS. McLAUGHLIN:

13 Q Have you ever conducted a contingent
14 valuation to identify a price premium associated
15 with the good sold in the marketplace?

16 A I'm not an expert at it. I haven't
17 conducted any of those surveys.

18 Q In your expert opinion, does a conjoint
19 analysis or a contingent valuation to establish a
20 more accurate price premium?

21 MR. MARCHESE: Objection to form.

22 THE WITNESS: These are two different
23 methods, and particularly as an example right
24 here in the ENERGY STAR logo price premium
25 example, I think you can see that they produce

1 very similar results. For me, I don't know
2 about contingent valuation methods, I'm not an
3 expert at it. I know that conjoint surveys
4 are used extensively in doing price premium
5 calculations. It's a very valid method. It's
6 a very reliable method that's being used
7 extensively.

8 BY MS. McLAUGHLIN:

9 Q I think you said a few minutes ago that
10 in your opinion conjoint analysis is the best
11 method. So would you agree with that?

12 A So I don't think I said it's the best
13 method. I said that there are comparable --
14 comparable methods. Contingent valuation method,
15 particularly, and as I've seen Dr. Dennis' report,
16 clearly has produced similar results to the conjoint
17 survey. And I'm an expert on conjoint surveys. I
18 do that all the time. And there clearly are
19 differences in the approaches for price premium. In
20 this case they seemed to have produced similar
21 results.

22 Q So going back to your assignment, that
23 paragraph in your report that says assignment, it
24 says you were focused on the price premium
25 attributable to the ENERGY STAR logo.

1 Now, what do you mean -- does that mean
2 that you were asked to identify the premium
3 associated just with the logo as opposed to any
4 price premium for the ENERGY STAR program?

5 A So, in the conjoint survey we tested an
6 attribute, and I don't have the exhibits from my
7 report here in front of me, but if you look at the
8 exhibit, it gives you the exact language that was
9 used for the ENERGY STAR logo, whether it was
10 present or absent. And what we tested is the
11 presence or absence of the ENERGY STAR logo on a
12 clothes washing machine and how consumers would
13 trade that off against as compared to all the other
14 attributes.

15 Q Would you expect that the price premium
16 associated with that -- the ENERGY STAR logo would
17 be different or the same on a different kind of
18 ENERGY STAR product, such as a lightbulb, would the
19 same percentage that you found apply to a different
20 product?

21 MR. MARCHESE: Objection to form, lacks
22 foundation.

23 THE WITNESS: So my opinion would be
24 that -- and again, this is in the absence of
25 the data, but strictly on the basis of my

1 expertise as an academic, having done this in
2 many different industries. If you had to
3 apply it to a lightbulb, the attributes that
4 make up the purchase of a lightbulb are very
5 different. The price and the demand-side
6 issues that you want to take into account
7 supply-side issues that you want to take into
8 account are very different for a lightbulb
9 than for a washing machine. So what my
10 opinion here of the \$180.39 as a price premium
11 is for the ENERGY STAR logo, the presence
12 versus the absence, the price premium, for a
13 clothes washing machines, and I would not
14 apply that percentage to lightbulbs or
15 anything else.

16 BY MS. McLAUGHLIN:

17 Q So the price premium associated with
18 the ENERGY STAR logo, in general, would depend on
19 what the product was at issue?

20 MR. MARCHESE: Objection.

21 BY MS. McLAUGHLIN:

22 Q Is that your understanding?

23 MR. MARCHESE: Objection, lacks
24 foundation.

25 THE WITNESS: Well, the entire survey

1 in the data that you have here is all about
2 clothes washing machines, you know, so the
3 price premium here is relevant to that. A
4 lightbulb merely costs \$2. What it would be
5 for that lightbulb would be something that we
6 would have to, you know, understand all the
7 other attributes and how consumers place
8 importance on those attributes as compared to
9 the ENERGY STAR program logo on the lightbulb.

10 BY MS. McLAUGHLIN:

11 Q Would your price premium apply to any
12 type of clothes washer so -- or is it specific to
13 just the pricing associated with this washing
14 machine?

15 A Could you repeat that question?

16 Q Let me rephrase it because I don't
17 think it was very good question.

18 Would you expect that different types
19 of clothes washing machines would have different
20 price premiums, so washing machines that are
21 front-loading would have a different price premium
22 if they were ENERGY STAR rated versus the washing
23 machines at issue?

24 A So if you look at how the conjoint
25 survey works, it does control for all of the other

1 attributes, and then as it pertains to the ENERGY
2 STAR logo you're looking at what's the value
3 consumers place on the presence of the ENERGY STAR
4 logo versus the absence. And then when we go back
5 into -- so applying formula 14, which is from the
6 Ofek and Srinivasan paper, we do take into account
7 the likelihood that someone would purchase a Maytag
8 machine into those calculations. So clearly, the
9 process of calculating the price premium, first and
10 foremost understands what the value is for the
11 presence or the absence of the ENERGY STAR logo.
12 And then the calculation of the price premium, using
13 formula 14, will also take into account competitor
14 affects in coming up with the exact price premium.

15 Q So would your price premium apply to
16 any washing machine sold in the 200 to \$700 range?

17 MR. MARCHESE: Objection to form.

18 THE WITNESS: So the value of a dollar
19 is calculated in that 200 to \$700 range. The
20 price premium is particularly looked at, given
21 that the average price for -- based on the
22 retail data that we had, the average price for
23 the C6 Maytag machines were -- was about 400
24 and-some dollars. I can't remember the exact
25 number. It's in my report. I can tell you

1 what that is. The price -- the value of the
2 dollar was looked at for between \$300 and
3 \$500. And so the price premium would apply
4 specifically to models -- so while we tested a
5 broad range, it would apply more specifically
6 to that 300 to that \$500 range.

7 BY MS. McLAUGHLIN:

8 Q So it would apply -- the \$180 price
9 premium you found would apply to any washing machine
10 priced in the 300 to \$500 range; is that correct?

11 A Can you repeat that question again for
12 me?

13 Q Sure. The \$180 price premium you
14 identified, are you saying that itself it would
15 apply to any washing machine that's sold in the 300
16 to \$500 range?

17 A Yeah. The value of the dollar is
18 calculated in a broad range, but yes, it's applied
19 to that 300 to \$500 range.

20 Q Now, does your survey take into account
21 anything to do with the ENERGY STAR program and how
22 efficient a washer it is, or is it solely focused on
23 the logo?

24 A The attribute that is described is
25 focused on the ENERGY STAR logo. If you give me my

1 exhibits, I can read out exactly what was used in
2 there.

3 Q We can get to that. We'll get to that
4 in time.

5 A And then the levels looked at whether a
6 product had the ENERGY STAR logo versus did not have
7 the ENERGY STAR logo.

8 Q Did you make any assumptions about
9 whether the technology needed to make these washing
10 machines more water and energy efficient made the
11 machines more costly to produce?

12 A Can you repeat that question again?

13 MS. McLAUGHLIN: Could you repeat it?

14 (At which time the following question
15 was read back by the reporter:

16 "Question: Did you make any
17 assumptions about whether the technology
18 needed to make these washing machines more
19 water and energy efficient made the machines
20 more costly to produce?"

21 THE WITNESS: You know, there's many
22 assumptions in that question. So there's the
23 technology assumptions and then there's the
24 cost assumptions, but if you look at -- you
25 know, when you look at retail sales data and

1 you're kind of basing, you know, selection on
2 the aspects that went into the conjoint
3 survey, using all of that information, the
4 technology and cost implications are already
5 baked into what the -- you know, what those
6 retail sales data would suggest.

7 I'm not an expert, specifically, I
8 don't do any technology manufacturing or I
9 don't do manufacturing consulting, so I could
10 really not tell you about the exact technology
11 details or the exact cost details, but given
12 that all of the supply-side considerations are
13 taken into account with that retail sales
14 data, the survey itself does look into all of
15 those as we designed the inputs into it.

16 MS. McLAUGHLIN: Should we take a
17 break?

18 MR. MARCHESE: Sure.

19 VIDEO OPERATOR: Off the record at
20 10:06 a.m.

21 (Brief recess.)

22 VIDEO OPERATOR: Going back on the
23 record 10:21 a.m.

24 This is the beginning of disc 2 in the
25 deposition of Dr. Sukumar.

1 BY MS. McLAUGHLIN:

2 Q Dr. Sukumar, could you provide a
3 definition of price premium?

4 A Sure. Price premium is the portion of
5 price, the part of price that consumers pay for the
6 clothes washing machine that you would allocate, and
7 in this case specifically to the Maytag -- the three
8 model numbers, the part of that price that you would
9 allocate to the presence of the ENERGY STAR logo.

10 Now, you can go on to -- I would like to go on to
11 explain what that price premium reflects is how much
12 the price would have to be discounted in order to
13 maintain the same amount of sales if the ENERGY STAR
14 logo were to be taken off. In the same way, how
15 much would you want to put extra on the price to
16 maintain the same sales if you were to add the
17 ENERGY STAR logo. That's what the price premium is.

18 Q What does the word "price" mean in the
19 phrase "price premium"?

20 MR. MARCHESE: Objection to form.

21 THE WITNESS: The price is what the
22 class members, you're paid for the Maytag
23 Centennial models that you're looking at
24 ultimately.
25

1 BY MS. McLAUGHLIN:

2 Q And what does the word "premium" mean
3 in the phrase "price premium"?

4 A It's the amount of the price that they
5 paid that would be attributable to the ENERGY STAR
6 logo; its presence or its absence.

7 Q Does calculating a price premium
8 require knowledge of economics?

9 A Well, the calculation of price premium
10 does not require knowledge of economics, but having
11 said that, in doing my Ph.D., I have -- while my
12 Ph.D. is in marketing and statistics, I have
13 knowledge of economics and econometrics as well.
14 And most importantly, here in the survey research
15 that is being done, the conjoint survey that is
16 being done, that's important to understand what the
17 value is to estimate the value off the ENERGY STAR
18 logo, as well as the value of the dollar.

19 Q Would you agree that one definition of
20 a price premium is that it's the difference between
21 the market price of the product, here a washing
22 machine, with the feature, the ENERGY STAR logo, and
23 the market price of the same machine without the
24 logo?

25 A Can you repeat that question?

1 Q Sure. Would you agree that one
2 definition of a price premium is that it's the
3 difference between the market price of the product,
4 a washing machine, with the ENERGY STAR logo, and
5 the market price of the same machine without the
6 logo?

7 MR. MARCHESE: Objection to form.

8 THE WITNESS: Well, the market price
9 definition that you're giving is kind of
10 vague. And what one would really want to do,
11 when you consider looking at price premium, is
12 ascertaining from a consumer perspective when
13 you look at their preferences to buy a Maytag
14 Centennial machine with the ENERGY STAR logo
15 and to without a logo, you know, how much of
16 the price they pay, how much would you
17 actually allocate or put part towards, you
18 know, the presence or absence of the ENERGY
19 STAR logo.

20 So the definition that you gave assumes
21 a lot of things. The definition that I gave
22 you is very specific to understanding the
23 class, as an aggregate, in the part of the
24 price that they paid for the Maytag Centennial
25 machines and how you would apportion that

1 price to the presence or the absence of the
2 ENERGY STAR logo.

3 BY MS. McLAUGHLIN:

4 Q What is market price?

5 A Well, you know, the definition is what
6 you're giving me, so I'd be curious to understand
7 what assumptions you're putting into the word
8 "market price" because it's a very general term.
9 You know, one could give it many different
10 definitions, depending on the assumptions, so I'd be
11 curious how you're looking at so I can explain it to
12 you.

13 Q I'd be interested to know what is your
14 definition of market price.

15 MR. MARCHESE: Objection, vague as to
16 term "market price."

17 THE WITNESS: So, you know, the
18 definition of price here that we have taken is
19 looking at the retail price and looking at
20 what the class members have -- in the
21 aggregate have paid for the Maytag washing
22 machine. So price is clearly defined in that
23 fashion in terms of how much was paid. When
24 you add the word "market" to it there's a lot
25 of different potential assumptions, which I

1 don't want to get into, but for me it's that
2 retail sales data that gives you a clear
3 understanding for what retail prices are paid
4 for the Maytag Centennial machines, the three
5 models that we are looking at.

6 BY MS. McLAUGHLIN:

7 Q So I'm just not sure if I understand
8 what you said. What is -- I don't quite understand,
9 what is your definition of "market price"? What do
10 you think of when I say market price?

11 MR. MARCHESE: Objection, asked and
12 answered.

13 THE WITNESS: So, you know, the -- I'll
14 drop the word "market" and I'll say focus on
15 the word "price," and the word "price" as it
16 was used here in calculating the price premium
17 because, you know, people use the word "market
18 price" very loosely to assume a whole group of
19 consumers, a whole class. It could be, you
20 know, particular retail establishments, but
21 the specific definition that I'm using at here
22 is really to look at the class as an
23 aggregate, what price they paid for the Maytag
24 Centennial machines, and then understanding
25 price premium as the part of that price that

1 they paid that is -- that is devoted to the
2 ENERGY STAR logo.

3 BY MS. McLAUGHLIN:

4 Q Do you need to be qualified as an
5 economist to estimate a market price?

6 MR. MARCHESE: Objection.

7 THE WITNESS: My opinion, you know,
8 again, I would ask you the question, which I
9 asked earlier, which is, what is your
10 definition of "market price"? I gave you my
11 definition of price and retail price and the
12 price that consumers pay, what the class paid
13 for this product. That's really, you know,
14 that doesn't require an economist, it does
15 require someone like myself with a Ph.D. who
16 -- in marketing, economics is an element of
17 marketing and statistics and market research
18 and consumer research. So if you tell me what
19 your definition of market price is, then I'll
20 maybe give you an opinion just based on my
21 many years in academia about, you know,
22 whether you need someone with an economics
23 degree or not.

24 BY MS. McLAUGHLIN:

25 Q What is an equilibrium price?

1 A Again, you know, an equilibrium price,
2 which is not, you know, something that is a simple
3 definition, you know, it's not a -- economists often
4 say about price changes between competition may
5 ultimately settle on a particular point and that
6 becomes sort of the equilibrium price. So the
7 action/reaction as such. But that's not something
8 that is an opinion that I'm giving out here. I'm
9 not giving an opinion on equilibrium price and what
10 it should be and how the entire interior and
11 national equilibrium and all of these things go on.
12 Obviously I've been trained in these areas and so on
13 as a Ph.D. in marketing and statistics.

14 The assignment here for me has been
15 largely about calculating price premium for the
16 Maytag Centennial machines and doing it using
17 conjoint as a technique, which allows you to
18 understand the value of the ENERGY STAR logo
19 presence or absence as compared to the value of a
20 dollar.

21 Q So you're not able to, sitting here
22 today, give me the definition of an equilibrium
23 price?

24 MR. MARCHESE: Objection. I mean,
25 misstates testimony.

1 THE WITNESS: I think I kind of
2 commented on what equilibrium prices by
3 suggesting that an equilibrium price is likely
4 one that takes into account what competitors
5 decide on their prices and how they decide to
6 change their prices. And the kind of
7 information they might have in making those
8 demand-side considerations in reaching the
9 price. That's not something that I'm
10 testifying here as an expert, you know, the
11 definition of equilibrium price. I'm here to
12 look at the price premium using a conjoint
13 survey. And to look at the price premium and
14 say, well, what does that mean for the ENERGY
15 STAR logo on the Maytag Centennial machines.

16 BY MS. McLAUGHLIN:

17 Q Is a market price the same as an
18 equilibrium price?

19 A So I would love to have a clear
20 definition that is in your mind because these are
21 very -- these are statements that even economists
22 define differently, depending on which economists
23 you talk to.

24 Q Well, I'm asking in your mind are they
25 the same thing? It doesn't matter what's in my

1 mind. I want to know what's in your mind. Do you
2 consider them the same thing?

3 A So, the retail price that -- the data
4 that was used in designing this conjoint survey does
5 take into account, you know, the prices that
6 consumers pay. Equilibrium price or market price
7 could mean very many things, and in my opinion, I
8 mean, unless I know what context you are actually
9 wanting me to apply this, I can't give you -- I
10 cannot give you an answer about whether they're the
11 same.

12 You know, for me, when I look at the
13 retail price, that retail price would take into
14 account competitive actions by different retailers.
15 So that could be a way by which information -- what
16 information each retailer had and how they decided
17 to set the prices as, you know, competitive actions
18 are taken into account, competition actions and
19 demands are taken into account. And that, in turn,
20 allows me to say, okay, when I look at calculating
21 the price premium on the Maytag Centennial models
22 that you're looking at here, using that retail price
23 and saying, what about that retail price, what
24 portion of that retail price can we attribute to the
25 ENERGY STAR logo; and that's really what my opinion

1 here is in the report.

2 Q So do you believe that your survey
3 identified the price premium that consumers actually
4 paid back in 2009 - 2010 for the ENERGY STAR logo?

5 A So the price premium that is calculated
6 here is really looking at the entire class as an
7 aggregate and estimating for these Maytag machines,
8 these models, given the price that we know, what
9 portion of that price would be attributable to the
10 ENERGY STAR logo? And to the extent that my answer
11 explains what you're asking, that's really what this
12 is doing.

13 Q So if I bought a washing machine in
14 2010 for -- your average is, I think, around \$400, a
15 little above. So if I bought a washing machine in
16 2010 for \$400, \$180 of that washing machine was
17 attributed to the ENERGY STAR logo; is that your
18 opinion?

19 A Yes, that's correct. That's my
20 opinion.

21 Q If you look back at your report, on
22 page 4, right under -- the first sentence under
23 Approach. Do you see what I'm pointing to?

24 A Yes.

25 Q That first sentence you say, There are

1 a certain number of clothes washing machines sold at
2 current prices displaying that logo.

3 What do you mean there by "current
4 prices"? Was it current as when you conducted the
5 survey? I'm just hung up on that word and what you
6 mean by it.

7 A Yes. This has to be taken in the
8 context of the entire exercise, right. So, you
9 know, obviously this is the very first sentence that
10 is explaining the approach; and the approach that is
11 taken out here is to look at sales data from the
12 past, historical data during that period, right, for
13 -- specifically for the Maytag Centennial models,
14 and then when you look at designing the conjoint
15 survey, you know, you're taking several other
16 inputs, including the inputs in 2015 as to what the
17 wide range of prices are. And in designing the
18 survey itself.

19 So this sentence here has to be taken
20 in the context of everything else that is done, and
21 so you're taking into account the prices -- so
22 finally the next sentence, and you read that, the
23 price premium is a reduction in price needed to keep
24 the same amount of unit sales when the clothes
25 washing machines are switched from having the ENERGY

1 STAR logo to not having the ENERGY STAR logo, all
2 else remaining the same. So what it really comes
3 down to is calculating the price premium as a
4 percentage, in this case, I think 44.3, if I recall
5 correctly, off the \$407, which was the current price
6 at that time, the average price that the class paid,
7 given the retail sales data in the 2009 to '12 era.
8 So what percentage of that price is being attributed
9 to the presence or the absence of the ENERGY STAR
10 logo.

11 Q I guess I still just don't understand
12 what you meant by "current price" in that sentence.
13 I'm not sure I quite understand it.

14 A Yes. The current price relates back to
15 the retail sales data that I just talked about,
16 right. So in being able to attribute from the
17 retail price in the 2009 to '12 era, what percentage
18 of that price is attributable to the ENERGY STAR
19 logo being present.

20 Q How is it current if you're looking at
21 2009 to 2012 sales data? Or are you looking at the
22 price that they're sold today?

23 A Well, we are attributing a value for
24 the presence or absence of the ENERGY STAR logo to
25 the price in the -- in the retail sales data for

1 Maytag Centennial machines in the 2009 to 2012
2 timeframe.

3 Q So go on to the next sentence that you
4 read for us, starting with, The price premium is the
5 reduction in price.

6 What do you mean by that last phrase,
7 "all else remaining the same"?

8 A So, if you look at how conjoint
9 analysis as a survey -- as a technique works, it's a
10 multi-attribute preference, class of methodologies
11 that is used here. It's essentially ensuring that
12 I'm looking at teasing out the ENERGY STAR logo, its
13 presence or absence, and I'm holding constant
14 everything else in understanding what's the value of
15 the ENERGY STAR logo, if it's present as compared to
16 it not being present. And so that notion of, you
17 know, controlling or putting everything else
18 constant as you design the value of the presence or
19 absence of the ENERGY STAR logo and then
20 apportioning, you know, what of that is applicable
21 to the Maytag Centennial machines, the price that
22 was paid then. That's really what it means.

23 Q Do you know if Maytag sold any washing
24 machines that were identical to the Maytag
25 Centennial, but did not have the logo?

1 A Could you repeat that question? You
2 got many different parts there.

3 Q Sure. Are you aware -- do you know if
4 Maytag or Whirlpool sold a washing machine that was
5 identical to the Maytag Centennial washers at issue
6 here with the only exception being the ENERGY STAR
7 logo?

8 A So again, I don't have all of the
9 retail sales data here in front of me, obviously,
10 but it's not something that I need to have when you
11 look at what we're doing right here, because the
12 approach I'm taking to price premium is really to
13 understand what's the value of the -- to the class,
14 as an aggregate, of the presence of the ENERGY STAR
15 logo as compared to the absence of it, and then how
16 does that value then transfer to the price that they
17 paid, as a class in the average, during that
18 timeframe.

19 Q So the answer is, you don't know if
20 there was available in the marketplace an almost
21 identical model but without the ENERGY STAR logo?
22 You don't know?

23 A So sitting here, I don't have exact
24 memory of that. But as I said, you know, that's not
25 critical or of importance here to how I went about

1 doing the conjoint survey and what does that reflect
2 in terms of the price premium and how we allocate
3 the price premium.

4 Q Does it matter for purposes of your
5 survey if the washers were, in fact, mislabeled, if
6 they were, in fact, ENERGY STAR compliant? Does
7 that fact matter to your survey?

8 MR. MARCHESE: Objection to form.

9 THE WITNESS: Can you repeat that
10 question again, ma'am?

11 BY MS. McLAUGHLIN:

12 Q Does it matter for purposes of your
13 survey if the washers were, in fact, wrongly labeled
14 as ENERGY STAR compliant?

15 A Well, for the purposes of my survey,
16 it's really an understanding of what the value is
17 for Maytag machines that would have the ENERGY STAR
18 logo versus those that would not have the star logo.
19 So it's really one of understanding a consumer's
20 value to the presence or absence.

21 In terms of a marketer's mistake of
22 labeling or not labeling, that is not the issue
23 here. It's really understanding what the price
24 premium is for the presence or absence of them.

25 Q So if the washing machines were

1 properly labeled that doesn't matter to your
2 calculation of the price premium?

3 A You know, I would say if the machines
4 were properly labeled, then consumers value
5 estimates and their experiences would be in line
6 with what we see here in the survey, but explicitly
7 for the survey that specific notion does not really
8 play. They're testing whether the machines had the
9 logo versus those that did not have the logo, what's
10 the real value of that.

11 Q So if you look on page 5 of your
12 report, and in that first full paragraph, the
13 second-to-last sentence, it says, These basic
14 techniques, when properly used, have proven to be a
15 reliable predictor of value for individual features
16 as well as impact on market price.

17 What do you mean by "when properly
18 used"?

19 A Well, the whole idea is properly used,
20 the whole set of conjoint techniques requires a
21 certain process, it requires a certain expertise.
22 And that expertise requires you to identify the
23 right kind of attributes. You got to go through the
24 process of understanding in a focus group how
25 consumers make purchase decisions. You got to

1 incorporate the right kind of attributes. And in
2 doing so, in going through that whole process,
3 you're then able to see how consumers make the right
4 choices. You also have to select the right
5 methodology. There are different methods for
6 multi-attribute preference estimation. I think I
7 talked about it in my report as well. And based on
8 that, you can really understand, you know, from a
9 product availability perspective. If you have a
10 product with many features you can start to
11 understand how these features are important to
12 consumers and what does that mean in terms of the
13 value they place for any individual feature.
14 Assuming everything else is --

15 Q So would you agree if a conjoint
16 analysis is flawed in its design or methodology,
17 then you can't rely on those results? Would you
18 agree with that?

19 A I think that's an assumption that
20 you're making out there in terms of what the exact
21 nature of the flaw might be. So assuming that the
22 conjoint survey was done right, like in this
23 particular case in what has been done, the results
24 are very valid and can be used.

25 Q And if it wasn't done right, then the

1 results are not valid and can't be used?

2 MR. MARCHESE: Objection to form.

3 THE WITNESS: Again, as I mentioned, it
4 depends on what you're looking at in terms of
5 being the flaw, and, you know, I'm not sure
6 the definition of flaw, what that might be.
7 And if it follows the process that I followed
8 out here, then there should be no flaw and it
9 should be done correctly and the results are
10 valid.

11 BY MS. McLAUGHLIN:

12 Q What do you mean in that sentence by
13 "reliable"? What's your definition of "reliable"?

14 A Well, to give an example of reliable
15 predictor of value, let's take just our case here
16 with looking at the price premium for the ENERGY
17 STAR logo for the Maytag Centennial machine. I
18 believe Dr. Dennis had a number that was very close
19 to mine. I also believe that the CEO of Maytag had
20 made a claim -- had made a statement about what the
21 price premium is for something like an ENERGY STAR
22 logo. When you start to look at either multiple
23 methods like this, they all seem to triangulate.
24 That's a suggestion that something is very reliable.
25 Now, the conjoint methodology that I've used out

1 here is used extensively, and if done right,
2 following the procedures that I have taken out here,
3 it's a reliable predictor of value, what consumers
4 value for -- place value for a particular feature,
5 like in this case, the ENERGY STAR logo.

6 Q I don't think you quite answered my
7 question, though. You answered "reliable" in the
8 circumstances of this case. I want to know when you
9 say conjoint when used properly is a reliable
10 predictor. What do you mean by "reliable"? How can
11 it be used? What's reliable about it, in general?

12 A So you know what I was trying to give
13 you an example here with the other numbers
14 essentially is to say that a reliable predictor of
15 value is a sign that multiple methods give you the
16 same answer. Right? That's one example of
17 reliability. And that's essentially what, you know,
18 what a reliable predictor is.

19 Q So if multiple methods give you
20 different answers, does that mean that one of the
21 methods is not -- may not be reliable?

22 A So there's an assumption there. And
23 we'd have to go back in and look at and say why was
24 there different answers? Right? So maybe the
25 context was different. Maybe the assumptions may be

1 different. So you'd have to look at that carefully
2 before you come to the conclusion you're asking.

3 Q But it's possible that it may not have
4 been reliably done if there are different sources
5 coming to different conclusions?

6 MR. MARCHESE: Objection to form.

7 THE WITNESS: I would say again you'd
8 have to understand what the context was, what
9 the purpose was for how each method was used.
10 In this case, particularly if you look at the
11 different methods were used for the same
12 purpose, right? Even though they were
13 different methods and they seemed to produce
14 very similar results, one would argue that,
15 you know, conjoint is a clearly very reliable
16 method to predict value.

17 BY MS. McLAUGHLIN:

18 Q So when you say "reliable," do you mean
19 that conjoint can predict what a company can
20 actually charge for a product with a new feature?
21 Is that one way that you use "reliable"?

22 A So if you look at, you know, the whole
23 sentence there, if a company is trying to
24 understand, they've included a feature, they priced
25 the product, no one will understand what the price

1 premium is, due to that particular feature, assuming
2 everything else is held constant, that ability to
3 calculate the price premium using conjoint analysis
4 is a very reliable method.

5 Q So what do you mean here by
6 "predictor," or "predictor of value"?

7 A So let me go back to just talking a
8 little bit about conjoint surveys and the whole idea
9 of what attribute preference is. Right. Say, a
10 product, such as a washing machine, is made up of
11 different attributes, of features. In this case we
12 looked at 19 of them. And what we are trying to do
13 is understand for the class members that are
14 surveyed out here, what is the, you know, what is
15 the value, so if they look at the entire product,
16 what value can you apportion to a particular
17 feature? I'm calling out the portion of the product
18 that they bought, how much of that portion can be
19 attributed, how much of value can be attributed to
20 the ENERGY STAR logo? So there's a certain amount
21 of prediction that is happening through the
22 technique. So conjoint is a tradeoff technique.
23 Based on how they made the tradeoff I'm predicting
24 how much value can be placed to the presence or
25 absence of the ENERGY STAR logo. That's really what

1 I mean by a predictor.

2 Q So can you do a conjoint survey on --
3 you can do it on a product that's already in the
4 marketplace and determine what one of those
5 attributes are, the allocation of value to one of
6 those attributes, or is it only forward looking?
7 Let me clarify because that was not a good question.

8 Can you do a conjoint analysis on a
9 product that's already in the marketplace and
10 determine what portion of the price is allocated to
11 a certain attribute?

12 A Yes, and that's exactly what we did --
13 what we did out here in calculating the price
14 premium.

15 Q And what, in essence, do you mean by
16 "impact on market price"? What do you mean by
17 "market price" in that sentence?

18 A In what I've describe out here, you're
19 taking the retail price of the three models, which
20 is an average of \$407 of the C6 models, and you're
21 saying what percentage of that price can be
22 attributed to the value from the class of the
23 consumers who were surveyed get from the presence of
24 the ENERGY STAR logo as compared to not having it.

25 Q Are you aware of any peer-reviewed

1 literature studies showing that a conjoint can be
2 used to isolate a price premium of a feature of a
3 good that was sold in the past?

4 A Absolutely. Certainly, if you look at
5 Ofek and Srinivasin's paper where they go through
6 the whole process of helping define how to look at
7 formula 14. Now this is a peer-reviewed paper, this
8 is a paper that was published in Marketing Science,
9 a very leading peer-reviewed journal among
10 academics. It also received an award. And I can't
11 remember the exact award, but it received an award
12 for just how practical this approach was in helping
13 understand, you know, the whole idea of price
14 premium and what consumers pay for it.

15 Q And that was for isolating a price
16 premium of a good already sold, previously sold?

17 A That's correct.

18 Q Are you aware of any other studies?

19 A You know, I can't remember -- I know
20 that this method is now being used very extensively.
21 And I, myself, have used it in other cases, as well
22 as other corporate work that I do. There may be
23 some other publications, but these publications tend
24 to happen more in trade journals as well because
25 they're actual applications of the technique. But I

1 know it's, you know, used very extensively.

2 Q How about any peer-review literature
3 showing that a conjoint can be used to isolate the
4 price premium associated with a logo?

5 A Well, the conjoint process itself is
6 used for attributes, it's used for claims, it's used
7 for logos. So in that sense, you know, off the top
8 of my mind, I can't point to an exact article, but I
9 can tell you that if you read these papers, they
10 clearly are agnostic to, you know, anything --
11 they're agnostic to the definition of the word
12 "attribute," as long as these attributes reflect
13 what drives a class of consumers to make a purchase
14 decision.

15 So in this case, the presence or
16 absence of the ENERGY STAR logo is something that is
17 important. We've shown that in this study, as well
18 as in the focus groups and so on, where the presence
19 of the ENERGY STAR logo is an important attribute in
20 driving consumer purchase decision making. And so
21 conjoint as a survey technique is really all about
22 that. So it's -- I'm sure there are peer reviewed
23 publications. I can't remember from the top of my
24 mind, but if you look at just what I said, it's very
25 relevant to an ENERGY STAR logo, which is an

1 important driver of purchase. And there's many
2 studies that have shown that it's an important
3 driver of purchase.

4 Q If you want to turn back to page 5 of
5 your report, that second full paragraph. In the
6 middle it says, For instance, give an example of an
7 attribute other than price.

8 Do you see where I'm referring? It's
9 two sentences from the bottom. Or three sentences
10 from the bottom, excuse me.

11 A Yeah.

12 Q The sentence strikes me as a little odd
13 and not quite fitting. Is this -- was your report,
14 or any part of it, created from some sort of
15 template?

16 A No, it's a sentence that I might have
17 overlooked because what I did do there is I gave an
18 example of an attribute like top load versus front
19 load as being the levels. Right? And I might have
20 put that as a note to myself and then left it out
21 there as I was reading through it when I went back.
22 So -- but it really reflects what I said before
23 that, you know, an example of an attribute would be
24 the loading type and whether it's a front load or a
25 top load. So the two levels. That's really what

1 that is.

2 Q But this is basically like a
3 placeholder for you to give some sort of example?
4 Is that what you're saying?

5 A No, it's just something that I was
6 writing to myself and it probably got left in. And,
7 you know, I probably typed it initially and, you
8 know, priced at different levels, like \$200, \$300,
9 et cetera, and also wanted to, for the benefit of
10 the reader, give another attribute like, you know,
11 the loading type, whether it's front load or top
12 load.

13 Q So this report is not based on a
14 template that you use for other reports?

15 A Well, I do work on other cases and it's
16 possible that there are certain paragraphs that I've
17 written before that I may have used in this report,
18 you know, but it's not like I write templates that
19 just go in there. But there certainly would be
20 things that I may have used or described before.
21 Again, having done so many conjoint studies as an
22 expert I may have used some of those paragraphs.

23 Q Go on to that next sentence, Conjoint
24 analysis measures each consumer's values for
25 different levels of features.

1 Are you saying that the conjoint
2 measures value on a consumer-by-consumer basis?

3 A So the methodology that we use, ASEMAP,
4 is a multi-attribute preference method that gives
5 you what is the utility. So the value is also
6 described as the part-worth utility for one level of
7 an attribute as compared to another level of an
8 attribute. So ASEMAP that is used out here gives
9 you that value for each consumer. Other techniques
10 like choice-based conjoint will also accomplish that
11 for fewer attributes, but will also use -- excuse
12 me, additional -- will need to use additional
13 statistical techniques like hierarchy Bayesian in
14 order to accomplish that same exercise.

15 Q So what you're saying is that you can
16 look at the values on an individual basis so you can
17 see what each respondent attributes to each feature?

18 A That's correct. But -- on the same
19 token, when you look at price premium, you have to
20 look at price premium as an aggregate. So you have
21 to aggregate the value across the class of consumers
22 in the survey and then apply formula 14, which we
23 can -- in the Ofek and Srinivasan paper. To apply
24 it correctly, you have to take the value across the
25 entire class in order to come up with a price

1 premium.

2 Q So moving down to the next paragraph,
3 the first sentence of that last paragraph, By
4 comparing the value difference between two levels of
5 ENERGY STAR to the value difference between prices
6 300 and \$500, I am able to determine the price
7 premium, if any, attributable to the ENERGY STAR
8 logo.

9 Can you define "value difference"?

10 A Sure. So I just mentioned that you get
11 the part-worth utility for the presence of the
12 ENERGY STAR logo as compared to the absence. Right.
13 So you can take the difference, that difference
14 gives you the value of the ENERGY STAR logo, and you
15 can then compare that -- so this is again a general
16 statement of explaining as to how price premiums
17 have to be looked at, the actual exact formula that
18 is applied needed to average it across the entire
19 respondent group in order to get to that. So you do
20 take the value for the presence of the ENERGY STAR
21 logo as compared to the absence, and you compare it
22 to the value of a dollar in that 300 to \$500 range.

23 Q So is value the same as utility? Are
24 you using those words interchangeably?

25 A That's correct. I'm using those words

1 interchangeably, so I say part-worth utility, that
2 utility is for each level of an attribute. Right.
3 I'm using the word "value" as being sort of that
4 whole value of that attribute.

5 Q And when you say "compare" in that
6 sentence you're essentially meaning divide, correct?

7 A Well, that's kind of what it is. But
8 if you -- you have to go apply formula 14, which I
9 talk about in my report subsequently. You had to
10 apply that correctly. So you do have to take into
11 consideration certain other things. You have to
12 average the utilities, the difference in the utility
13 for the ENERGY STAR logo versus the absence, as well
14 as that for the price in order to get to a net
15 point.

16 Q So to make sure I understand properly,
17 what you're doing here is you're computing the part
18 worth for the ENERGY STAR logo and the part worth
19 for the price and then you're dividing one by the
20 other; is that right?

21 A Along with the application of that
22 formula correctly.

23 Q And what is a "willingness to pay"
24 computation?

25 A So willingness to pay is slightly

1 different. It really comes down to what's the
2 maximum value. What is the maximum price that
3 consumers would be willing to pay for just a, you
4 know, an improvement from one level to another
5 level. It doesn't take -- it doesn't have to take
6 into account -- it's really more something that you
7 use when you're trying to design new products. It
8 doesn't have to take into account some of the
9 factors that we take into account. It doesn't take
10 into account those different aspects in coming up
11 with that maximum price consumers would be willing
12 to pay.

13 Q So if I understand, willingness to pay
14 is basically a computation where you compare the
15 part worth of an attribute for part worth for price.
16 Is that a willingness to pay?

17 MR. MARCHESE: Objection, misstates
18 testimony.

19 THE WITNESS: Well, there are several
20 other things that have to be looked at when
21 you're doing the willingness to pay -- when
22 you even get the utilities for willingness to
23 pay. So, for example, because it's the
24 maximum price someone is willing to pay for,
25 you know, an attribute change, you don't have

1 to include brand as an attribute. You don't
2 have to take into account demand or
3 supply-side considerations in designing some
4 of the elements that go into the conjoint
5 survey. That's -- a willingness to pay again
6 is that maximum price that consumers would be
7 willing to pay for an attribute improvement.

8 BY MS. McLAUGHLIN:

9 Q So a willingness to pay is not the same
10 as a price premium?

11 A That's correct.

12 Q And why not?

13 A For, you know, some of the same reasons
14 that I mentioned, it's just in terms of its the
15 maximum price that consumers would be willing to
16 pay. It is -- it does not take into account brand
17 considerations. It does not take into account
18 supply or demand-side considerations. It's really
19 looking at the maximum price that consumers would be
20 willing to pay for improving something, improving
21 some aspect of a product.

22 Q So if I understand your testimony, the
23 difference between a willingness to pay and what you
24 did here is that you took into account the
25 supply-side and demand-side factors; is that right?

1 A That's correct.

2 Q Now, what do you mean when you say
3 "supply side"?

4 A So for the supply-side factors we
5 looked at the retail sales data, and clearly when
6 you're looking at Maytag Centennial machines we are
7 looking at the actual retail sales for these in
8 which aspects of how individual retailers might have
9 reached what products they offer, how much is
10 available of those products, all of those are
11 taken -- are baked into, you know, supply-side
12 factors that are baked into that retail sales and
13 the prices that are there at the retail which then
14 become the input for the conjoint survey.

15 Q What is "supply"?

16 A So you're asking me the question what
17 is "supply" in a very generic sense. I'm probably
18 going to give you an answer that in a little more in
19 the context of availability of a product in the
20 store. Right. So it really relates to wholesalers
21 making the product supplied to a retailer. So
22 supply would be that aspect. That's my assumptions
23 within which I'm trying to answer. I don't know
24 exactly where you're coming from in terms of asking
25 that question.

1 Q You mentioned the word "supply-side"
2 several times, so I want to kind of break that down
3 and say: What does supply mean?

4 A So for me the supply-side
5 considerations would look into, you know, based on
6 the retail sales, it's all baked into it, whether
7 the product is available or the level of inventory;
8 so distribution, those are factors in that.

9 Q What else -- what other things affect
10 supply in a market? You said retail sales,
11 distribution. Is there anything else?

12 A When you look at retail sales data for
13 Maytag Centennial machines, you're really looking at
14 across the store. So we had Fry's, Sears, Home
15 Depot, Lowe's. The availability of the product
16 across the different retailer is automatically
17 reflected in the retail sales data. So, you know,
18 whether they have an inventory, whether that's
19 available, whether the manufacturers are making the
20 product available through the wholesalers, all of
21 that would be supply-side considerations that are
22 reflected in that sales data.

23 Q But as you sit here today, you don't
24 recall exactly what you were looking at in the
25 retail sales data; is that correct?

1 A If -- you know, again, there's a little
2 bit of flashback memory coming in, you know, as to
3 what -- there's clearly 2009 to 2012 data that was
4 in there. And the retail sales data for Maytag
5 Centennial machines, the three models, depending --
6 I don't have the data exactly in front of me for me
7 to reflect on, you know, which retailer had what
8 kinds of models for Maytag Centennial, available
9 ones.

10 Q Sure. But do you recall now if the
11 retail sales data that you looked at included
12 competitors' machines, or is it solely focused on
13 the Maytag Centennial washers?

14 A I think I want to say probably they did
15 not have competitor information, but when looking at
16 Maytag's sales data for the different models, the
17 competitor data is in some sense the competitor
18 actions and some are reflected in the retail sales
19 for the Maytag models.

20 Q How is that?

21 A Well, the number of units they would
22 sell at the retailer is reflective of what
23 competition has done, whether they have raised the
24 prices or lowered the prices, and as a result it's
25 in there. So if I -- again, I'm trying to, in the

1 absence of the data in front of me, I think take the
2 retail sales data there was only reflecting the
3 Maytag Centennial models.

4 Q But from that data you could make
5 assumptions as to what was happening in the rest of
6 the retailer space, what else they were doing with
7 competitor machines or other Maytag machines?

8 A Yeah, because this sales data is really
9 a reflection of the actions taken by other
10 competitors. Right. So it's already included or
11 baked into it, as you consider that and the price in
12 looking at the price premium.

13 Q And how exactly did you incorporate
14 that -- those sales data into your survey?

15 A So one is a reflection of how we
16 capture price and taking into account the average
17 price, which is really the key component of what I
18 need, looking at the average price, but also setting
19 out the ranges of prices for us to look at and test
20 based on some of that retail sales data.

21 Q So you used it in two ways, if I
22 understand, one was to figure out that average price
23 of I think about \$407, and the second way was to
24 figure out the ranges, the 200 to \$700 range in your
25 survey; is that correct?

1 A Yeah. And then it's also looking at --
2 you know, those would be two key. There would be
3 other aspects, you know, much smaller aspects in
4 terms of defining how we look at the average data
5 and looking at the price premium around that.

6 Q I don't understand you. Can you
7 clarify that a little more?

8 A So the 407 number is what you mentioned
9 is a good example of that, is a good example of how
10 the retail sales data helps with understanding what
11 the price premium were to mean.

12 Q But you said you also used it for
13 helping with defining average data. And I don't
14 understand what you meant by that.

15 A To clarify exactly what I just said,
16 which is, looking at the retail price data, right,
17 in looking at the average across the three-year
18 period in coming up with the price premium.

19 Q So your \$407 average, was that for all
20 three models or just one model, two models?

21 A I think again, from recollection now,
22 and I want to be careful, majority of the sales, if
23 I recall, were probably for the two C6 models, and
24 so I may have used the average price for those two
25 models in looking at the average price that I used

1 for the price premium.

2 Q Why would you have excluded the C7?

3 A Well, one, I think, if I recall a
4 little bit here again, I don't have the data in
5 front of me, if I were to look at it, the C7s may
6 have been \$100 higher than approximately, I don't
7 know the exact number, but they also sold fewer
8 units than the C6 models. So, in my opinion, I said
9 let's take a more conservative approach and let's
10 look at price premium in the context of the C6
11 models rather than looking at all of the data
12 together.

13 Q And would your \$180 price premium apply
14 then to the C7s?

15 A So it actually might be a little
16 higher, right. It may not be 180, it might be a
17 little higher. So from that point of view, the \$180
18 is a very conservative estimate when you apply it to
19 the C7 as well.

20 Q But you would say that you should apply
21 it?

22 A Absolutely.

23 Q When you looked at the data that you
24 use to get the \$407 average retail price, were you
25 looking at nationwide or were you only looking at

1 the seven states at issue?

2 A You know, I don't have it so I can't
3 recall exactly, but I think I was focused more on
4 the seven states. I need to go back and look at the
5 data to give you an exact answer on that.

6 MR. MARCHESE: Allison, can we take a
7 quick bathroom break? I'm sorry.

8 MS. McLAUGHLIN: Absolutely.

9 VIDEO OPERATOR: Off the record at
10 11:16 a.m.

11 (Brief recess.)

12 VIDEO OPERATOR: Going back on the
13 record, 11:26 a.m.

14 This is the beginning of disc 3 in the
15 deposition of Dr. Sukumar.

16 BY MS. McLAUGHLIN:

17 Q When was the conjoint analysis first
18 introduced?

19 A So conjoint analysis, if I recall
20 correctly, again, I'm getting a little outdated now.
21 1964 is when psychometricians first developed it, no
22 computers at that time. 1974 is when Professor
23 Srinivasan from Stanford University, who created the
24 ASEMAP method as well, and is our chief research
25 advisor for my company, he, and Paul Green, from the

1 University of Pennsylvania, brought conjoint to the
2 field of marketing and had several papers published
3 at that time.

4 Q And what was the purpose of the
5 conjoint survey when it first began? Was it for
6 litigation purposes or in the marketing business?

7 A Well, it was initially used for,
8 obviously, a lot of different, you know, designing
9 and developing new products, new services,
10 understanding price premium for, you know, what the
11 reason for that price premium would be, for products
12 and services. It's been used extensively in
13 litigation now and it is used in different kinds of
14 litigation. So, you know, if you look at my resume,
15 as well as Professor Srinivasan, and others, we've
16 testified for it in other claims work using this.
17 We've also used it for patent litigation kind of
18 work. So it's used in litigation as well. And
19 there are close to, and I report this in my study,
20 more than 18,000 conjoint studies that are done each
21 year, you know, across the world in different
22 languages, in different countries, using ASEMAP
23 we've done many hundreds of those conjoint studies.
24 And I've used it for commercial purposes as well as
25 litigation purposes quite extensively.

1 Q Is the purpose of a conjoint survey is
2 to get as close as to how consumers behave as
3 possible as you can in a survey?

4 MR. MARCHESE: Objection to form.

5 THE WITNESS: Can you repeat that
6 question for me again?

7 BY MS. McLAUGHLIN:

8 Q Is the purpose of a conjoint survey to
9 get as close as to how consumers behave as possible?

10 A One of the purposes of conjoint study
11 is really to understand what drives the person's
12 behaviors. So what is a value that consumers place
13 on various attributes, as an example, the ENERGY
14 STAR logo, the presence or absence of it, or, you
15 know, certain automated features that might be in a
16 clothes washing machine. So what is a value to
17 place on that and how does that value drive the
18 purchase that they make.

19 Q But as I understand conjoint surveys
20 generally, often time they try to mimic how a
21 consumer would make a purchase decision, correct, by
22 showing different options and saying, well, which
23 option do you prefer? Is that correct?

24 A Well, there are different types of
25 conjoint methodologies. One such methodology you

1 may show, with a limited set of attributes, how you
2 might compare, you know, one product versus another,
3 but you can only take a few attributes. Anything
4 more than five or six leads to what is often called
5 as information overload. A consumer is reading far
6 too many attributes and they go, I don't know, and
7 it generates other -- it generates a lot of issues.

8 Now, in this particular instance when
9 you look at washing machines, there are a lot of
10 attributes. There's about 19 attributes. So as
11 compared to using a choice-based conjoint or some of
12 the technique, you know, with my experience and
13 expertise in this field, I chose ASEMAP as being the
14 right methodology to use in order to understand the
15 same thing in terms of how consumers value one
16 attribute as it pertains to driving their purchase
17 decisions.

18 Q How many conjoint surveys have you done
19 in your career?

20 A Well, Optimal Strategix Group as a firm
21 does more than a hundred a year. So if you look at
22 about eight years of being in business, you can do
23 the math. Prior to that, I've done a lot of
24 conjoint work as a professor and as someone working
25 directly with various cancer companies. So for the

1 life of my career so far there's a lot of conjoint
2 analysis work that I've done, and as an expert. And
3 then one of my firm's chief research advisor is a
4 very -- a person who created conjoint, brought it to
5 marketing and used it very effectively over many
6 years, Professor Srinivasan. And so his guidance
7 has always been there for a lot of our work in the
8 company.

9 Q And what is Professor Srinivasan's role
10 in your firm?

11 A Professor Srinivasan is a chief
12 research advisor. And again, as a father and
13 founder of conjoint analysis has tremendous
14 influence in, you know, making sure that we use it
15 correctly and do it correctly and so on.

16 Q So is he paid in this position?

17 A As a chief research advisor, you know,
18 I can't get into all the details --

19 Q Sure.

20 A -- but yes, he is a paid person of the
21 company, yes.

22 Q And what is a chief research advisor?
23 What does he do?

24 A As a chief research advisor, he's
25 constantly bringing, you know, very well validated

1 new tools and methodologies that are appropriate for
2 us to use in solving different problems so that
3 they're on the commercial side, or in this case, on
4 the litigation side, and advises us on the, you
5 know, -- my firm is almost 100 employees that we
6 employee. And he provides a lot of guidance, a lot
7 of training, coaching.

8 Q Have you, you personally, ever
9 conducted a conjoint analysis for a good that has
10 been sold in the past, but that's no longer on the
11 market?

12 A Yes, I've done that.

13 Q And what was the purpose in those
14 cases, or one case?

15 A Can you go back to the previous
16 question you asked? I want to make sure I qualify
17 my answer correctly.

18 Q Have you ever conducted a conjoint
19 analysis for a good that has sold in the past, but
20 is no longer available in the marketplace?

21 A So the answer is still the same. Yes.

22 Q How many times?

23 A You know, I can't remember exactly how
24 many times, but I'll -- you know, it's been done for
25 products like lawnmowers that some of the models are

1 no longer there. It's done for litigation purposes
2 as well, various kinds of patent infringement cases
3 where some of those patents are no longer, you know,
4 available in the products. So I've done it for a
5 number of instances. I just don't have an exact
6 count for you.

7 Q In the non-litigation context, what was
8 generally the purpose of conducting the survey?

9 A At the time it was used to understand,
10 for example, you know, what's the value of certain
11 features and what's the price premium. That would
12 be one example. It was looking at -- by
13 understanding that price premium, the manufacturer
14 was looking to essentially say should we add other
15 features, should we remove certain features, so
16 specific business questions being answered by
17 looking at -- you know, backward looking into those
18 products and saying what's -- what -- how much is a
19 particular feature contributing to the overall value
20 and what should we do, as it pertains to keeping it
21 on the market.

22 Q Were any of these studies aimed at
23 predicting what the price should be charged in the
24 future?

25 A As it pertains to looking at existing

1 features of past products, no. As it pertains to
2 looking at, you know, at designing other new
3 products in the future, yes. But in the context of,
4 you know, of doing price premium analysis was really
5 looking at past products.

6 Q And have you ever conducted a conjoint
7 study to identify the price premium associated with
8 the consumer product in the non-litigation context?

9 A Can you repeat that question for a
10 second?

11 Q Speaking of the non-litigation context,
12 have you ever conducted a conjoint study to identify
13 the price premium associated with the consumer
14 product, such as a washing machine or --

15 A Yes.

16 Q How many times have you done that?

17 A I can't give you an exact number. I'd
18 have to go sit through the firm's records to kind of
19 start to count some of that stuff. I am sorry. But
20 one example that sticks in my mind is an example of
21 lawnmowers and, you know, very established products,
22 and the question really came down to certain
23 features, should we take them out, keep them and
24 what is the price premium we're getting on those.
25 So it's a historical kind of look at those products.

1 Q Have you ever done a price premium
2 study for a home appliance, like a washing machine,
3 refrigerator?

4 A No, I can't recall, but that doesn't
5 mean that we haven't.

6 Q But you personally.

7 A I personally may not have been
8 involved, if my memories might have struck me now
9 and then.

10 Q Have you ever before conducted a
11 conjoint analysis to identify the price premium of
12 the ENERGY STAR logo?

13 A You know, I can't recall, but I'm going
14 to answer that as a no. I'm just trying to scratch
15 my head and think through whether that was one of
16 the features used in some of the other energy
17 efficient -- energy products that I used. I mean,
18 there are other kinds of logos like the ENERGY STAR
19 logo, you know, the UL classification and so on that
20 some of the electronic products have. But
21 specifically related to ENERGY STAR logo I cannot
22 remember.

23 Q But you personally have done conjoint
24 studies for other types of logos; is that what
25 you're saying?

1 A Yeah, I've done it for other types of
2 logos. Again, I can't remember the exact specifics
3 on them, but there would be mostly for commercial
4 purposes, not for litigation purposes.

5 Q So what would the purpose generally be
6 for doing that kind of conjoint study?

7 A It would be partly to understand price
8 premium. I'm trying to think now. There was some
9 work I had done with -- in the gaming industry and
10 there are certain things that go in on those
11 products. I can't get into all the details. These
12 are all confidential things. But they would have
13 been such classificatory logos like the UL and so on
14 included in some of those.

15 Q So you were trying to determine a price
16 premium associated with the logo?

17 A With the presence or absence of those
18 logos, yeah.

19 Q And were these in the litigation
20 context or commercial context?

21 A Most of those would be in the
22 commercial context and, obviously, I've used
23 conjoint in litigation purposes. I most recently
24 did it in similar kinds of claims. It wasn't a
25 logo, but a similar kind of a claim. And then I

1 used conjoint very extensively in patent
2 litigations. But on the commercial side, yes, some
3 of these logos and classification marks, or
4 trademarks, whatever you want to call them, have
5 been tested.

6 Q What's your breakdown of commercial,
7 non-litigation versus litigation work?

8 A Again, hard to give you an exact
9 number.

10 Q Estimates are fine.

11 A But I would say probably somewhere
12 around 10 percent of our work tends to be, from a
13 dollar revenue perspective, tends to be litigation
14 work. Much of our work is commercial related.

15 Q So that when you say "our," you're
16 talking about your firm as a whole as opposed to you
17 specifically?

18 A Yes. You know, as a firm as a whole
19 I'm part of the firm. I'm the Chief Executive
20 Officer of the firm. Most of the litigation cases I
21 handle myself. I also do a lot of other commercial
22 cases as well.

23 Q Have you ever conducted a conjoint
24 survey for a retailer or a manufacturer?

25 A Yes.

1 Q Which one, retailer or manufacturer, or
2 both?

3 A Both.

4 Q Have you done so to predict what price
5 your client would charge if they added a new
6 feature?

7 A Yes.

8 Q How about taking away a feature?

9 A Yes.

10 Q So when you perform these kind of
11 analyses how are the supply-side factors affecting
12 the price accounted for?

13 MR. MARCHESE: Objection, lacks
14 foundation. Objection to form.

15 THE WITNESS: Can you help me clarify
16 the question a little bit more?

17 BY MS. McLAUGHLIN:

18 Q Sure. You said you've performed
19 conjoint surveys where you predict what price your
20 client should charge if they add a feature or take
21 away a feature. And when you do these, how do you
22 take into account supply-side factors?

23 A Very similar to what we did in this
24 case. We would look at, you know, retail sales
25 data, for example, understand what prices are being

1 charged for the different models, and then, you
2 know, bake all of that information into designing
3 the conjoint survey in the correct way. And through
4 that process being able to understand what would
5 happen, you know, looking backwards to their sales
6 as they try to understand the presence or absence of
7 a feature and the price premium around it, what does
8 that all mean? What does that all reflect? So
9 those factors are taken into account as we look at
10 the data, the sales data and the price data, in
11 order to come up with the designs.

12 Q Have your clients ever chosen to price
13 a product with a new feature higher or lower than
14 what you -- your survey indicated they should?

15 MR. MARCHESE: Objection, lacks
16 foundation.

17 THE WITNESS: So I can't give you a
18 single answer to that. It varies by cases.
19 It also varies by what, you know, our
20 recommendations is; and our recommendation,
21 you know, for example, for a manufacturer is
22 based on customer or consumer reaction. So
23 it's really more at the retail price level.
24 They may have chosen to take that information
25 and add an appropriate distributor markup.

1 And that would actually reflect your point, an
2 increase beyond what we had asked them to do.
3 Right. So that's how they end up doing the
4 actual field execution of our recommendation.

5 So most of our clients, I'd say almost
6 all of our clients take our recommendations
7 very, very seriously. They do implement and
8 execute on these recommendations. They first
9 actually make a great attempt to understand
10 our recommendations and then go into executing
11 those recommendations.

12 I can give you, you know, several
13 examples where our clients have, for example,
14 seen the value of certain features and chosen
15 to raise the prices based on our
16 recommendations and seen their sales or
17 shares, you know, do what they expected it to
18 do. In the same way, they have taken features
19 out based on the fact that, you know, the
20 price needed to be adjusted as well. So
21 fundamentally looking at that backward data,
22 looking at what conjoint does, we have been --
23 we have influenced a lot of decisions. I
24 can't tell you any one specific case study;
25 that's all confidential information that I

1 wouldn't be able to share with you. But our
2 recommendations are taken extremely seriously
3 by our clients, and I have also used this
4 method and testified, Professor Srinivasan has
5 testified in several cases using ASEMAP and
6 the, you know, Plaintiffs have won appropriate
7 awards because of the work that we have done.

8 BY MS. McLAUGHLIN:

9 Q Going back to situations where the
10 manufacturer takes what you've given them and then
11 adjusts it, and decides to price it higher than you
12 recommend, or lower, what are some of the factors
13 that they look at in deciding how to change, how to
14 implement your information?

15 MR. MARCHESE: Objection, lacks
16 foundation.

17 THE WITNESS: Can you clarify that for
18 me a little bit more what exactly you are
19 looking for --

20 BY MS. McLAUGHLIN:

21 Q Sure.

22 A -- because it's got multiple parts of
23 that question. I'm a little worried that I don't
24 know what part I'm answering to your question.

25 Q You said that there are circumstances

1 where a client of yours considers your information
2 very seriously and then prices it a little higher
3 than you suggested or does something -- doesn't
4 price exactly as you suggest. And what is the
5 reasoning, what other factors go into that
6 manufacturer's decision on where to price?

7 MR. MARCHESE: Objection, lacks
8 foundation.

9 THE WITNESS: So there's multiple
10 factors that go into it and they may decide
11 what those factors are. Obviously, one
12 example, which I just shared with you, they
13 may choose to mark it up because, you know, we
14 tested prices that customers or consumers pay,
15 and those are reflective of retail prices and
16 they have to look at it and say, well, what
17 does that mean for compensations and
18 commissions that we have to give to a direct
19 sales force or to other channel members.

20 So the answer to that question would be
21 just it depends on the individual circumstance
22 and what they have to do and how they have to
23 look at it. There may be other
24 considerations. But they, in all instances,
25 take our recommendations and then look at the

1 application to that recommendation to final
2 decisions again.

3 BY MS. McLAUGHLIN:

4 Q You said there are multiple factors.
5 What are the factors that you've seen the
6 manufacturers or your other clients take into
7 account in deciding price?

8 MR. MARCHESE: Objection, lacks
9 foundation.

10 THE WITNESS: You know, I just
11 answered. That one example would be looking
12 at the commissions that are to be given to
13 salespeople, looking at the margins that have
14 to be applied, you know, looking at it if it's
15 a feature that they plan to add, and this may
16 be a totally different context and I want to
17 be careful about what I'm saying here. You
18 know, they may have had to take other kinds of
19 considerations into place. And they may be
20 internal considerations like, do they have the
21 capabilities to add on a particular feature.
22 So it may not be something like a logo, but it
23 may be certain other engineering capabilities
24 and what does that do to the product in
25 totality. And I think those are internal

1 considerations that they would use.

2 BY MS. McLAUGHLIN:

3 Q So you mentioned commissions and
4 decisions that they might want to mark it up above
5 what you've recommended. What are some other
6 factors that you've seen?

7 A I think I just answered the question.
8 I feel a little lost here when you ask me this
9 question? Is there something I'm not answering? I
10 just answered. I said, you know, there may be some
11 technical things that they have to look at. Right.

12 Q You said you gave me one example and
13 you thought that was enough, but there are many
14 factors, and I'm just wanting to know what are all
15 of the factors that you have seen in your career
16 that go into a manufacturer's decision to take your
17 survey and change the price ultimately that they
18 use?

19 A Technical considerations would be one.
20 So if there is true value in a particular feature,
21 but -- and we suggest that there's a certain price
22 premium that they can charge for it, it's possible
23 that in order to improve the customer's experience
24 they may have to, you know, change the technical
25 specifications of the product. That would be

1 another example. But the whole context has to be
2 looked at, you know, on a case-by-case basis. It's
3 not a blanket answer for all of the different
4 reasons. But, you know, that's a few of them that
5 you can look at.

6 Q Has a client ever taken your
7 recommendation and gone with a price premium lower
8 than what you recommended?

9 MR. MARCHESE: Objection to form.

10 THE WITNESS: You know, it's a very
11 broad question you're asking.

12 BY MS. McLAUGHLIN:

13 Q Let me restate it.

14 A I don't have an answer to it in that
15 broad a fashion.

16 Q You said that your clients will take
17 your -- the information you've provided on -- I'm
18 assuming on how to price -- to do a new price if you
19 add a feature or subtract a feature, correct?

20 A Yes.

21 Q Have you ever had a client implement a
22 lower price than you suggested?

23 A It depends on the situation, and
24 sitting out here today, I really can't think through
25 everyone of those cases and tell you here is a case

1 where they did what you're suggesting they should
2 have done. Right.

3 Q So sitting here today you can't recall
4 any suggestions?

5 A There's a lot of different pieces of
6 work we do. Our recommendations that we give our
7 clients are very, very seriously taken. It's very
8 fact based. We've got a very powerful methodology
9 that we help use and it just -- the question you ask
10 is so broad that I just don't have an exact answer
11 for you for that.

12 Q What is a science of survey sampling
13 about?

14 MR. MARCHESE: Can you repeat that
15 question, please? I just want to make sure I
16 heard it right.

17 (At which time the following question
18 was read back by the reporter:

19 "Question: What is a science of survey
20 sampling about?")

21 THE WITNESS: Now, can you help me with
22 characterizing what kind of -- what are you
23 looking for in this answer a little better
24 because there's sampling techniques that are
25 used for doing surveys.

1 BY MS. McLAUGHLIN:

2 Q Is there a science to survey sampling?

3 A There are techniques that are used in
4 sampling for surveys. There's the statistical
5 approach, right. Statistics is the science that
6 guides and defines the type of sampling methodology
7 that you need to use and the different context.
8 I've never heard of a science of survey sampling.
9 I've heard of, you know, the science of statistics
10 and its applicability to the sampling methodology
11 that you use for surveys.

12 Q Are there people that refer to
13 themselves as sample statisticians?

14 MR. MARCHESE: Objection, lacks
15 foundation.

16 THE WITNESS: Well, you know, there are
17 people who do -- again, there's -- there's a
18 lot been written, you know -- I would say
19 there's a lot been written in terms of
20 sampling techniques and the probabilities and
21 statistics that one has to take into
22 consideration. For example, you know, for a
23 random sampling versus a convenience sampling,
24 for a random sampling versus a sampling that
25 might be done at a mall. So clearly, you

1 know, there are publications in peer reviewed
2 journals that talk about sampling techniques.
3 But there isn't a field like the science of
4 survey sampling, at least not to the best of
5 my knowledge. And the science of statistics
6 allows us and guides us, and those guiding
7 principles are very much the approaches that
8 we have taken here in designing the right
9 sample for completing the survey. Right. And
10 the randomness of the people participating in
11 the surveys, et cetera, is well-handled as a
12 survey sampling technique, as a method in
13 guiding us in doing all the statistics that we
14 need to do.

15 BY MS. McLAUGHLIN:

16 Q What is a random sample?

17 A So, a random sample is -- essentially
18 suggests that if you take a sampling frame, meaning
19 if you take, you know, obviously the population of
20 the class in the seven states that we're talking
21 about, right, it would be the population and then
22 you would go to a sampling frame which would allow
23 you to randomly identify a broader list of people
24 that you might source to complete -- to select from
25 that to complete from the surveys.

1 Now, random sampling essentially says
2 that every respondent there has an equal chance of
3 being selected. And that's a theoretical
4 definition. And the way that is actually executed
5 in any survey is to start with a sampling frame or a
6 sampling list, and then to go out and survey those
7 respondents to randomly send -- in this case who did
8 online surveys, and online surveys were sent to that
9 list, which is random. I have no knowledge of who
10 people are. I didn't go in there and say, well,
11 Allison lives in -- Counsel Allison here lives in
12 the state of California, I want to have her
13 participate in the survey. So there wasn't a
14 specific deliberation like that to identify any
15 specific individual. It's a randomly generated
16 target, you know, e-mail sent out, invitation sent
17 out for people to participate in the conjoint survey
18 -- the online survey.

19 Q So is a random sample where you just
20 don't know who is going to participate? You're not
21 deliberately selecting people to participate, is
22 that essentially what you mean by a random sample?

23 A Yeah, and from the science of
24 statistics you would say that everyone has an equal
25 chance of being selected out of that sampling frame.

1 Q And do statisticians prefer you to use
2 a random sample?

3 A As in this case, yes. We've used a
4 random sample.

5 Q I'm not asking if you did it in this
6 case. I'm saying do statisticians prefer the use of
7 random samples?

8 A Well, you know, statisticians would say
9 that you ought to have a random sample, and that the
10 statistics of all probability distributions are used
11 when you have a random sample. So in this
12 particular case, we have a random sample that came
13 from an online panelist called Instantly, a very
14 large panel. That's the sampling frame that we
15 used, and everyone in the class had an equal chance,
16 in the seven states, had an equal chance of being
17 selected to participate in the survey.

18 Q Is it possible to -- if a statistician
19 wants to conduct a standard error to compute the
20 reliability of a statistics, does this require the
21 sample be a random sample?

22 A Well, there are certain statistics that
23 you report. So, for example, a margin of error
24 around an estimate based on the assumption that the
25 sample that you have is a random sample. And again,

1 in this case, if you look at my exhibits, which I
2 don't have in front of me, but if you look at the
3 exhibits, the random sampling errors are designed on
4 the assumptions that this is a random sample that
5 has been used.

6 Q Do you need a random sample to use a
7 confidence interval or a standard error?

8 A A random sample is required for certain
9 types of confidence intervals that are, in the world
10 of statistics, referred to as parametric statistical
11 distributions. But you can also create confidence
12 intervals from samples that are not random, using
13 other techniques, other -- what are referred to
14 commonly as non-parametric statistical techniques.
15 So the answer to your question would be that it
16 really depends on what path someone wants to take in
17 terms of designing these confidence intervals.

18 Q What's a convenience sample?

19 A Boy, I feel like you're testing my
20 knowledge of statistics and everything. A
21 convenience sample is just as the word says, a
22 convenience sample. If I go out and decide to stand
23 outside the Starbucks restaurant downstairs and I
24 intercept people coming into the Starbucks store,
25 it's my convenience of just standing outside a store

1 like that and asking people to participate in a
2 survey. That's considered a convenience sample.

3 Q How is your sample a random sample?

4 A My sample is a random sample because we
5 use an online panel, such as Instantly, which has a
6 very large number in a -- more than 4 million people
7 identified in that particular list nationwide. And
8 when we invited them to participate in the survey,
9 it was not convenience. I did not stand outside the
10 Starbucks store. It was -- everyone had the equal
11 chance of participating in the survey. They were
12 invited. The questions about demographics were
13 asked in a manner that would allow us to look back
14 and say was this sample representative of the U.S.
15 census, and then obviously we screened them out for
16 having to be class members as well as having to have
17 had certain other criteria, such as, they are 18
18 years and older and a few other criteria that we
19 had. Again, if you give me the exhibits, I can tell
20 you what those criteria are. So our sample is a
21 random sample. Our sample is going to that huge
22 list. I know no one personally on that list. I'm
23 sure there are friends and family on that list, but
24 I don't know if they're there or not there. So it's
25 not convenience. It's not deliberate. Everybody

1 had an equal chance of participating in the survey.
2 they were randomly selected. They were sent an
3 invitation to participate in the survey and they
4 completed parts of the survey. So it is a random
5 sample.

6 Q You mentioned that you screened for
7 class members; is that right?

8 A If you give me the exhibits, I will
9 point to the fact a question asked them about what
10 state they belonged to.

11 (Exhibit 4 (Quantitative Screener &
12 Questionnaire), 22 - 28, was marked RS-2 for
13 identification.)

14 BY MS. McLAUGHLIN:

15 Q The court reporter has handed you what
16 has been marked as Exhibit SR-2. What is that
17 document?

18 COURT REPORTER: RS.

19 MS. McLAUGHLIN: RS. Thank you.

20 THE WITNESS: So this is the
21 quantitative screener and questionnaire, the
22 online survey, the conjoint survey.

23 BY MS. McLAUGHLIN:

24 Q So this is the document that you need
25 to be able to show me how you screen for class

1 members?

2 A Yeah. This is the document where, as
3 you can see, you know, the -- page 26, question SQ
4 08 asks if you're a primary decision-maker and
5 purchaser of appliances of household items. If you
6 are not a decision-maker, you're screened out. It
7 asks the next question about -- you indicated that
8 your household has a clothes washing machine. When
9 was it purchased? So we want to make sure that we
10 had people who have purchased a clothes washing
11 machine.

12 And then if you look at SQ 11, we ask
13 them about their state in which they live.

14 Q What did you do with -- did you exclude
15 anyone based on the answer to the state they live?
16 I do not see it in your report. When you say you
17 screened for class members, I'm trying to understand
18 how you screened for class members.

19 A So we looked at people who bought
20 washing machines, we looked at the states that they
21 were part of, and we included -- we included people
22 that were there in the seven states that I've
23 indicated.

24 Q Did you exclude anyone on a basis of
25 what state they lived in?

1 A Give me one second, please.

2 Q Take all the time you need.

3 A I believe we did -- I can't see the
4 exact wording here in the survey, but the
5 instructions -- we definitely chose not to exclude
6 any of the class members. So we did make sure we
7 included those. But I will need to verify that.
8 I'm not sure from the top of my mind here.

9 Q Why would you have made a decision to
10 exclude class members?

11 MR. MARCHESE: Objection.

12 BY MS. McLAUGHLIN:

13 Q If you did, why in devising a survey
14 would you choose to exclude class members?

15 A No, I said we made sure that we did not
16 exclude any class members.

17 Q Okay.

18 A That was the comment I made.

19 Q But is it correct that your sample
20 population did not require them to be a class
21 member?

22 A You know, I'm going to say this again,
23 which I'm 100 positive that we did not exclude any
24 class members. I will need to, you know, just go
25 back to -- I'm pretty positive that we were -- we

1 did not exclude any other class members. I need to
2 look at the exact criteria and get back to you on
3 that.

4 Q Is it your understanding that some
5 percentage of the people in your sample were not
6 class members?

7 A I don't believe so, but I need to
8 verify -- I have to verify the answer to that
9 question.

10 Q So as you're sitting here today, you do
11 not know whether your sample was 100 percent class
12 members or some class members and some non class
13 members?

14 A Again, we did not exclude any of the
15 class members. That I'm absolutely positive for --
16 about. I'm just -- my memory is getting a little
17 fuzzy right now.

18 Q Sure. Do you know if there were any
19 class members in your sample? Do you know if any of
20 the respondents to your survey were, in fact, class
21 members?

22 A I'm positive we did not exclude any
23 class members.

24 Q And I understand that.

25 A Yeah.

1 Q But do you know -- do you know, sitting
2 here, if there were any class members who took your
3 survey?

4 A I'm positive there were members --
5 class members who took the survey.

6 Q Now, is it important that your sample
7 be representative of the proposed class in this
8 case?

9 A The only way to determine
10 representativeness is to go to a universal truth,
11 which would be the U.S. census. So the way we
12 looked at it is, invitations went, and the
13 demographic questions that are asked of the screener
14 are designed so that we have an understanding for
15 whether the invitations went to the representation
16 of the U.S. census. If that is the case, we did --
17 sometimes you do get a little bit imbalance in that
18 representation and you correct it through a process
19 called rating. And we've done that in the context
20 of the analysis section.

21 Q So to make sure I'm understanding
22 properly. You only -- let me start again. In
23 determining if your sample is representative, you're
24 only looking if it's representative of the U.S.
25 census; is that correct?

1 MR. MARCHESE: Objection.

2 THE WITNESS: I'm looking at, it is the
3 invitations that went to the U.S. census and
4 the people that have completed the
5 demographics questions, right, is
6 representative of the U.S. census. Now, post
7 that, if that is representative, then the rest
8 of the questions which deal with, you know,
9 having purchased a clothes washing machine, et
10 cetera, are now going to be reflective of a
11 smaller subset and is completely
12 representative because the incoming selection,
13 the incoming or the outgoing e-mails through
14 to participants was representative of the U.S.
15 census, and the U.S. census is the only data
16 to which I can compare. As far as the other,
17 you know, individual state census or an
18 understanding for what is representativeness
19 for the specific class, that's going to be
20 much more harder to do.

21 BY MS. McLAUGHLIN:

22 Q Did you do any research into the people
23 who comprise the class in terms of demographics?

24 A I didn't think it was necessary for us
25 to do that because, as I said, the invitations

1 before the screenouts, the screenouts being those
2 that actually completed the survey, the invitations
3 went out to those who are representative of the U.S.
4 census, which is the gold standard that I can
5 compare against to say yes, you know, this is a
6 representative recruitment that I've done, and so
7 there's really no need for me to understand the
8 representation of the class or other areas.

9 Q So it doesn't matter what the
10 demographic makeup of the class was as long as your
11 sample goes to the census; is that what you're
12 saying?

13 A Yeah, because I haven't excluded
14 anyone. The sample is large enough. I haven't
15 excluded anyone from the class. The invitations
16 were sent out and then the representation of the
17 people that participated in the survey can be
18 automatically looked at, because as far as the
19 representation of the invitations that went out, I
20 know that it is -- it reflects the U.S. census, and
21 the U.S. census data is the gold standard against
22 which I can compare. Anything else is going to be
23 not comparable to say yes, there's representation or
24 otherwise.

25 Q Do you know if the general population,

1 as reflected in the U.S. census, is the same as
2 people in the class? Do you know if their
3 demographics are different?

4 A Again, you know, as I said a little
5 while ago, which is that -- the invitations to the
6 survey as surveys have gone to a representation of
7 the U.S. population, U.S. census, right. And that's
8 something that we've shown. So we've not excluded
9 anyone from the class. Now, as it pertains to those
10 who actually completed the conjoint survey, these
11 individuals have met the criteria. So the only
12 representation that I can compare it to is to who
13 did the invitations go, and when they completed the
14 demographics part of the survey do those
15 demographics match the U.S. census because that's
16 where the representation can be proven. Anywhere
17 else I won't be able to prove true representation.
18 The true representation is proven at that U.S.
19 census level, and post that everything else is now
20 representative of the specific, you know,
21 parameters, a class, or whatever the case might be.
22 They are represented because the U.S. census level
23 has been represented.

24 Q What were the parameters you used after
25 the census portion to determine if someone was

1 representative of the class?

2 A We look at other whether they are
3 decision-makers to buy appliances. We looked at the
4 other screening question I read in terms of whether
5 they had made a decision to purchase a clothes
6 washing machine, and then lastly, the exact states.
7 So, again, we did not exclude anyone that was in the
8 class, and clearly, you know, the data would show
9 you that members of the class were part of the
10 survey.

11 Q Now, going back to the states issue.
12 Sitting here today, you do not recall if you only
13 included the people from those seven states or if
14 you allowed anyone in any of the 50 states to
15 participate?

16 MR. MARCHESE: Objection to form.

17 THE WITNESS: I don't remember that.

18 But as I said to you, I don't think we
19 excluded anyone that was part of the class.

20 BY MS. McLAUGHLIN:

21 Q Right. I understand that. But did you
22 exclude anyone from the 43 other states so that you
23 were only surveying people from the states at issue
24 here?

25 A I just need to refresh my memory on

1 that one. I can't remember it right now.

2 Q Well, feel free to take as much time as
3 you need to refresh your recollection.

4 A No, I can't remember it. I'll have to
5 come back to you on that.

6 Q Well, if you notice, several times in
7 this Exhibit No. 2, for example, if you look at SQ
8 07 on page 26, and at the bottom of that section it
9 says, think and terminate if SQ 07 does not equal 4.

10 What does that mean?

11 A So again, there's clearly in the
12 printing of this, there's a typo. You're on SQ 07.
13 The numbering should have started one on television,
14 two for laptops, three for microwave ovens and so
15 on. Four would be clothes washing machines. So if
16 the answer to the question, Which of the following
17 appliances or household items or gadgets do you have
18 if your household; if that did not include the
19 clothes washing machine, we would not include that
20 person in the survey.

21 Q So, and if you look at the next
22 question, SQ 08, under who is the primary
23 decision-maker, it says in -- after someone else
24 chooses and purchases the appliances, household
25 items, gadgets from my household; in brackets it

1 says think and terminate. Does that mean that if
2 someone gave that answer they would then be
3 terminated from the survey?

4 A That's correct.

5 Q So then if you turn to page 27, SQ 11,
6 it does not have a, in brackets, think and terminate
7 indication, does it?

8 A So it doesn't, but just like the
9 numberings are off there, I'm just not sure if that
10 instruction was in the survey, and my memory doesn't
11 serve me right in terms of just how we did that. So
12 that's why I'll need to -- I'll need a little bit
13 more time to think through this.

14 Q Sure. But your memory is that you did
15 exclude people from the other 43 states?

16 A I believe we did, but I do need to
17 confirm.

18 Q Why would you exclude people from the
19 other 43 states?

20 A Well, as I said, we don't want to
21 exclude anyone that was not part of the class.
22 Right. So that would be a reason for doing that.

23 Can we take a break or do you want to
24 finish this?

25 Q Yeah, we can take a break.

1 VIDEO OPERATOR: Off the record,

2 12:20 p.m.

3 (Brief recess.)

4 VIDEO OPERATOR: Going back on the
5 record, 1:29 p.m. And this is the beginning
6 of disc 4 in the deposition of Dr. Sukumar.

7 BY MS. McLAUGHLIN:

8 Q Dr. Sukumar, do you understand that
9 you're still under oath?

10 A Yes, I do.

11 Q Before lunch we were discussing how you
12 used the panel company called Instantly; is that
13 correct?

14 A Yes.

15 Q And what is a panel company?

16 A So, you know, we had talked about
17 sampling. And in order to sample a set of
18 respondents for an online -- to complete an online
19 survey you need a sampling frame. A sampling frame
20 would be a list of people that are representative of
21 the U.S. census, and so what Instantly has is a very
22 large, about 4 million-plus number of individuals in
23 the U.S. that are part of their database, a list.
24 So a panel company is someone who has a list, but
25 also manages to ensure that this list has people

1 that are properly refreshed, properly managed, so
2 they don't get too many surveys in a month, that
3 they're engaged in -- you know, in -- and when we
4 asked them to make a sample representative of the
5 U.S. census they're able to send an outflow
6 reflective of what the U.S. census looks like.

7 Q What does Instantly do to ensure that
8 their panel is representative of any population, or
9 of the U.S. census?

10 A So they -- you know, again, if you look
11 on the rep side they speak about a lot -- the
12 different things they do. The key thing is
13 obviously to make sure that panelists don't have
14 fatigue by getting too many surveys, that -- you
15 know, and besides what they do, we also have, as you
16 understand in the screening criteria, made sure that
17 we screen out people who have taken a survey most
18 recently because we don't want to have them take a
19 similar product category again. So they do a lot of
20 things to manage the panel to make sure that it is
21 used right and the participants are engaged
22 correctly.

23 Q And besides ensuring that they don't
24 take too many surveys, what does Instantly do to
25 make sure that the panelists are, I think you said

1 the word "refreshed"?

2 A I don't remember the exact specifics,
3 but if you went onto their website they actually
4 talk about a lot of the things that they do just
5 to -- you know, making sure that households are
6 properly represented, they're balanced. And they
7 may track other data or metrics as well. But
8 they're very, very reputable sample model. We use
9 them extensively; fairly large panel. In the
10 industry itself, in the market industry, they're
11 regarded very highly as a panel company that
12 provides very high superior quality data.

13 Q Is there a universe of participants
14 representative of the larger public?

15 A Can you rephrase that question to help
16 me out there?

17 Q Sure. The universe of Instantly's, I
18 don't know what the -- let's back up. What does
19 Instantly call its group of people that it may give
20 surveys to? Is there a term?

21 A I don't know if they use a specific
22 term, but I would call them a panelist.

23 Q Panelist. Thank you.

24 So is the universe of Instantly's
25 panelists representative of the larger public?

1 A Absolutely. I mean, with online
2 presence today, they have a very high, you know,
3 representation, you know, penetration of the access
4 to Internet. Their panel is very representative of
5 the population.

6 Q And how do they -- how do people get
7 involved with Instantly?

8 A I don't recall the exact process that
9 they follow, but they do follow a process to recruit
10 people to participate. And as I said, they also
11 engage them by giving them points and incentives,
12 which is a very common practice in the market
13 research survey industry in order to ensure a very
14 high quality of surveys being obtained. And, you
15 know, they ensure various ways that their panelists
16 are not double counted. They ensure, you know,
17 specific methods to mitigate any kind of fraud in
18 survey taking or robotics survey taking. And we put
19 in some other procedures on our data end as well to
20 make sure that the quality of the data that is
21 coming through is very, very high. Again, they're
22 rated in the industry standards as being a very high
23 quality sample provider.

24 Q Are the panelists for Instantly, do
25 they proactively sign up in advance with the

1 company? How does someone become a member of
2 Instantly?

3 A You know, I believe that they have
4 certain approaches to inviting people to participate
5 in surveys, and they do it through -- I'm going to
6 broadly define as a multi-mode approach. I can't
7 give you the exact specifics of that. I'm not
8 familiar with all the specifics, but, as I said, the
9 quality of the panel that they provide is very high.
10 They're rated very highly in the industry. If you
11 look at the website, they talk specifically about
12 how they recruit these participants and how they
13 engage them so that they do -- so they do have some
14 criteria about how many surveys these people can
15 take in a year and what kind of points they can
16 expect to win and other kinds of security things
17 that they do.

18 Q Does someone need to have access to the
19 Internet to be part of Instantly's surveys?

20 A With the very high penetration of the
21 Internet, you can do it on the Internet. You can
22 also do it on mobile devices. You can do it on your
23 smartphones and your iPads and so on. So it's easy
24 to do those.

25 Q But you do need access to the Internet,

1 whether it's on your computer or on your iPhone or
2 other mobile device?

3 A Yes, you do, because again the surveys
4 are done online. Also, the conjoint survey that we
5 have in this particular piece of work needs that
6 online access. The penetration of access to
7 Internet is very high. You know, I want to say
8 almost 98 percent of individuals or households have
9 some access to the Internet in the United States.
10 And so the quality of the panelists that they have
11 is very good. The quality of the sample that we get
12 is also very high.

13 Q Now, you mentioned before, you said
14 Instantly gives points or incentives and this
15 ensures quality of the respondents. How does giving
16 points and incentives ensure that there's quality in
17 the panelists?

18 A So let me make sure I didn't say it
19 incorrectly in the last sentence. So it ensures
20 engagement of participation of respondents. And
21 obviously, if you have people who engage in
22 participating because they're getting certain value
23 for the time that they're spending. I mean,
24 everybody wants to be compensated or incentivized.
25 When they participate or give their time to give

1 their opinions, they want to be provided some kind
2 of an incentive. That incentive ensures engagement.
3 That incentive ensures that people -- and it's not a
4 huge incentive. It's just a small incentive of
5 points that allows them to stay engaged with
6 completing the survey and participating in the
7 survey.

8 Q But how does getting some sort of
9 incentive ensure that they act -- I mean, I
10 understand that it ensures that they will go through
11 the exercise, but how does it ensure that they are
12 actively trying to give correct answers and
13 really -- how does it ensure that they're involved
14 in the survey and giving right answers as opposed to
15 just clicking boxes, and yeah, sure, that looks good
16 and whatnot?

17 A So this engagement that we want to talk
18 about at two levels. For Instantly, the giving of
19 the points ensures that the respondents are staying
20 on their panel. For the survey, from our point of
21 view, getting points ensures that people will commit
22 to the time that they said they would commit to take
23 the surveys, and therefore are engaged.

24 Now, there are other ways to ensure
25 that what you're getting is a very high reputable

1 quality of data. So, for example, I talk about some
2 of that in my report. One aspect of it is just
3 looking at, you know, how much time people took to
4 complete the survey. And we screen out if someone
5 took, you know, was a speedster. And a speedster, I
6 forgot the exact definition, but anyone taking less
7 than seven minutes to complete a survey, we would
8 essentially say that let's put them out of the
9 analysis of the results.

10 Another aspect, a very strong aspect of
11 ASEMAP is that we have something called the adjusted
12 R spread. And what that means is that as people
13 respond to certain parts of the ASEMAP survey and
14 then you look at how they make tradeoffs, if the two
15 are aligned, then the adjusted R spread calculation
16 would be higher than .2. So if it's less than .2,
17 we would essentially rule them out because they've
18 been going through it hurriedly. And so there are
19 other triggers like that to make sure that
20 respondents are giving us -- are engaged and are
21 giving us high quality data.

22 Q So you mentioned the speedster issue.
23 Do you exclude people who take too long? Say
24 someone takes 30, 40 minutes on a survey, so clearly
25 they're really not really engaged because it

1 shouldn't take that long to take a survey, would you
2 exclude those people?

3 A So, if you think about when they're
4 doing the ASEMAP exercise, which is where they're
5 telling us what their preferences are, that part of
6 the survey we want them to take in a single setting.
7 We don't want them to drop off and come back,
8 because we want them to be engaged. Now, the other
9 portions of the survey like someone is giving you
10 answers to demographics or a few other questions,
11 you know, it is what it is. It's what people tell
12 you they are or what they do, and as a result there
13 is no -- you know, you can give them the opportunity
14 to break and come back in. And so even though it
15 may be that the length of the survey that they take
16 time taking it is really long. They may have taken
17 a break, they may have started the survey and then
18 decided to take a break and then come back in and
19 complete it. And that's okay to do. Because a lot
20 of those questions are factual questions so they
21 come back in and they get engaged in it again.

22 Q Does ASEMAP have any sort of timeout or
23 does it kick you out if it takes too long for
24 someone to complete the ASEMAP portion of the
25 survey?

1 A So again, the quality of the data there
2 is very high, so we indicate to them right up front
3 that they should take it in a single setting. And
4 then if they go through it and they are going
5 through it very rapidly, let's say they doing the
6 tradeoffs repeatedly the same way, then it will
7 throw them out. There are other things, you know.
8 There is a timeout aspect of it as well. So we do
9 want them to sit through the whole exercise in one
10 go, and we instruct them that as well clearly that
11 they should take the whole exercise in one sitting.

12 Q So there is a timeout aspect to the
13 ASEMAP section?

14 A Yes.

15 Q Do you know what that is, how long?

16 A I don't recall the exact amount.

17 Q How did -- I think you said that the
18 speedster is defined as someone that takes less than
19 seven minutes; is that correct?

20 A That's correct.

21 Q And how do you determine what the time
22 is, the time threshold?

23 A So, we look at the distribution of time
24 taken by respondents. So on one hand we have our
25 other data cleaning rules that say if you are doing

1 a survey at five or six minutes we want to clean you
2 out. But we also look at across the whole sample of
3 people how long they take, what's the average,
4 what's the median; and typically an analysis like
5 that will tell us where to cut off the survey.

6 Q So your report, on page 16, says that
7 of the invitees 2,778 people responded, which was
8 5.4 percent. Is that right?

9 A Yes.

10 Q And who were the invitees? Is it
11 anyone on Instantly's that has signed up for
12 Instantly or is there a segment of Instantly's
13 universe that got an invitation?

14 A So let me explain what happens here.
15 You know, we had indicated to Instantly -- we had
16 given them instructions verbally that said we want
17 to go to the U.S. census, and they would send out a
18 large number of e-mails randomly.

19 So we talked about -- if you remember
20 earlier on, we talked about random sampling. So
21 they would randomly send out e-mail invitations to a
22 large number of participants. Now, of all of those
23 who were invited to participate, 2,778 clicked on
24 the link. They may not have actually completed the
25 survey, but they clicked on the link. And of those,

1 you can see right here that 176 were screened out
2 because they had participated in -- this is our own
3 quality check -- they had participated in a survey
4 during the last 90 days. And then we had other
5 criteria and, you know, as I think about it and I'm
6 reading this, I don't believe that -- I believe we
7 went to the entire U.S., so we did not -- we did not
8 restrict the states. We went to the entire U.S.
9 And as I think about it, one of the reasons we did
10 that is because the seven states we had -- you know,
11 we had a state in California, on the West Coast, we
12 had a Midwest state, we had southern states like
13 Texas and Florida, and then we had states in the
14 northeast. So realistically, you know, the sample
15 is fairly representative, so we kept it to the
16 entire 50 states, as I think about it.

17 And now as my memory comes back, one of
18 the other things we saw is that with that
19 representation, the -- even the seven states is
20 fairly heavy represented in the sample that we have.
21 So clearly we did not exclude any of the class
22 members, and the sample in that sense is very
23 reflective of the class that we wanted to go
24 through.

25 Now, when you look at what happens

1 there after the 176 that were dropped out, another
2 1,526 were screened out because they either did not
3 meet the age threshold or did not have a clothes
4 washing machine. So if you think about the funnel
5 starting from the top, you're going to a random
6 sample across the U.S. You're asking all these
7 demographic questions so that you can make sure that
8 the sample that clicked and completed that part of
9 the survey is truly representative of the U.S.
10 census.

11 Now, post that, I mean, given that you
12 met the first two criteria of representation and
13 randomness, the rest of the sample is now truly
14 reflective of the audience that we want to speak to.
15 So 1,526 were screened out due to these different
16 criteria and then additional 512 excluded because
17 they did not complete the survey. They might have
18 clicked on it, may have even answered a question,
19 but did not go through the rest, and they were
20 screened out because of that. So that really left
21 us with the 564 respondents that we started to work
22 with. And then go down to the next level of
23 ensuring that we had respondents who had an adjusted
24 R spread of greater than .2 -- like what I talked
25 about -- and they were also not speedsters. So the

1 criteria that we talked about. So by doing that, we
2 lost about 34 respondents. And the average time
3 taken by these 530 respondents was about 23 minutes,
4 so you can see, clearly see, they were engaged.

5 The ASEMAP exercise itself is very
6 engaging, and we heard this in the past in all the
7 other work that we've done. Participants will say
8 that they were very, very engaged in the survey.
9 And so, you know, that's really what happened out
10 here.

11 Q Okay, if we can get back. I appreciate
12 your giving that very long explanation. If we can
13 focus on just answering my questions, we can kind of
14 get out of here quicker. I do appreciate you
15 explaining everything, but if we can kind of focus,
16 otherwise I think we're going to be here for quite a
17 while.

18 You say that 5.4 percent of people
19 initially responded before you did that funneling.
20 Is 5 percent -- do you consider this a low response
21 rate?

22 A Well, if you think about response
23 rates, in the old days when we used to do surveys
24 that were door-to-door -- again, I'm sorry -- I'm
25 not going into a diatribe, but I want to make sure

1 that you understand that response rates were
2 important early on because response rates reflect
3 representation. Today, with online surveys and the
4 ability to send out e-mails to a large number of
5 individuals, the response rate is no longer of
6 any -- is not material. What is really material is
7 that, did you get representation and were you able
8 to prove that representation to a universal truth,
9 which is U.S. census out here. And the answer is
10 yes, we did get it. So for me the 5.4 percent
11 response rate is common and very standard, and in
12 the many surveys they've done online it's very
13 common to see that kind of low response rate.

14 Q What is response bias?

15 A Well, response bias is when -- and
16 again, response bias is very valid and used when
17 door-to-door service were done and mail service were
18 done, when often people who got engaged and
19 completed a survey and sent it back by the mail
20 quickly were different than those who did not
21 respond, particularly because, again, representation
22 was very important with them. So today when we talk
23 about response bias we are less concerned about it
24 because the representation is, you know, is clearly
25 being shown and exists in the data.

1 Q So if the response rate is very low,
2 isn't there a concern still for response bias?

3 A I don't believe so. And the reason
4 again for that is, there's no response bias. We're
5 sending out a large number of e-mails. The ability
6 to do e-mail invitations to people from a large
7 panel is easy to do, inexpensive from that point of
8 view because, you know, you're sending out a large
9 e-mail blast. So there isn't -- the response bias
10 is more driven by how long the survey was kept open.
11 Now, if you decided to keep the survey open for two
12 months, you probably will see the response rate go
13 up.

14 So for us, the target sample of 500
15 plus was what we were looking to accomplish, and it
16 was accomplished. So a big amount of people who did
17 not respond was because this survey was no longer
18 open and we had collected the data that we needed to
19 collect. And when you look at it in that sense, a
20 response rate of 5.4 percent is very reasonable.
21 And if I look, you know, again, in my experience and
22 expertise, and I look across many online surveys,
23 the lower response rate does not indicate, you know,
24 a response bias of any kind.

25 Q Now, you've mentioned several times,

1 and your report goes into it about how you
2 re-weighted the sample so that it resembled the U.S.
3 census. Why did you do that?

4 A Again, that's very standard practice in
5 the industry. You're never going to see the sample
6 of people who completed that demographics questions
7 to be exactly identical to the U.S. census. It will
8 always be off by a little bit. And in order to make
9 sure that you have representation, balancing and
10 weighting to ensure that the sample is balanced is a
11 very standard practice that is done.

12 Q Are you aware that experts in survey
13 sampling have shown that re-weighting doesn't work?

14 MR. MARCHESE: Objection, lacks
15 foundation.

16 THE WITNESS: So I don't know the exact
17 details of what you're saying and what the
18 context is from, you know, there might have
19 been a different context in which they might
20 have been explaining that, but if you look at
21 the market research industry, and it's a very
22 common practice, and again, in my own
23 experience, expertise, I've used weighting to
24 ensure that the sample is balanced, as long as
25 your -- you have a gold standard, a frame of

1 reference, in this case U.S. census, to which
2 you are comparing the sample against and then
3 you're doing the weighting to reflect that
4 census.

5 BY MS. McLAUGHLIN:

6 Q So are you aware of criticism that
7 re-weighting does not make an unrepresentative
8 sample more representative?

9 MR. MARCHESE: Can you please read back
10 the question for me?

11 (At which time the following question
12 was read back by the reporter:

13 "Question: So are you aware of
14 criticism that re-weighting does not make an
15 unrepresentative sample more representative?")

16 MR. MARCHESE: Objection to form.

17 THE WITNESS: So again, you know, there
18 are all schools of thought. I mean, people
19 who -- and there's a lot of literature out
20 there. I'm not sure exactly what literature
21 you're pointing out to. And I don't accept
22 every piece of literature that is written.
23 There are things that are fair. There are
24 certain things that are really not reflective
25 and the situations might have been different,

1 the context in which they're talking about it
2 would be different. But if you look at,
3 again, industry practice and expertise across
4 the entire market research industry that does
5 conjoint, or for that matter other
6 traditional surveys, you will see that
7 weighting is a very standard practice.

8 BY MS. McLAUGHLIN:

9 Q Now, going back to your recollection now
10 that the survey did cover people in all 50 United
11 States, would you expect that the price premium for
12 consumers, for respondents in California may be
13 different than the price premium for respondents,
14 say, in Texas?

15 A Well, when you're looking at price
16 premium you're looking at it as a aggregate measure.
17 So the aggregate across the class and the fact that
18 we did not exclude anyone in the class, I would not
19 expect to see any differences. I would essentially
20 say that we need to look at price premium as an
21 aggregate measure across all of the states that
22 you're talking about.

23 Q Well, would you agree -- so California
24 is a drought-ridden state, right? We know that
25 there's a drought in California. Would you agree

1 with that?

2 MR. MARCHESE: Objection, lacks
3 foundation.

4 THE WITNESS: Well, if that's an
5 assumption you want me to make, I'll accept.

6 BY MS. McLAUGHLIN:

7 Q Okay. The ENERGY STAR logo has to do
8 with energy and water efficiency, correct?

9 A That's correct.

10 Q So wouldn't you say -- isn't it
11 possible that people, on the aggregate, in
12 California, care more about water and energy
13 efficiency in people than, say, a state that has
14 plenty of water and there's not a concern with the
15 drought?

16 MR. MARCHESE: Objection, lacks
17 foundation.

18 THE WITNESS: So, you know, when you
19 look at price premium, if any, for the ENERGY
20 STAR logo, and you're looking at it as an
21 aggregate, irrespective of what you take, what
22 states you take in the class, you're going to
23 see even in California, those who make --
24 maybe people there who are concerned about
25 drought and there are others that are not

1 concerned about drought. So you're going to
2 see both effects coming in. That would be
3 one. The other thing is, even in states where
4 there's no drought, they may be concerned
5 about electricity bills, they may be concerned
6 about energy bills. So the definition, as
7 they react in the conjoint survey to the
8 ENERGY STAR logo, in my opinion, we can't
9 stop, you know, we have to look at it as an
10 aggregate when you're looking at a price
11 premium. You can't look at it as one
12 individual here or one individual there.

13 BY MS. McLAUGHLIN:

14 Q Could you take your survey data and
15 determine what the price premium would be for people
16 who were just in California versus just the people
17 in New Jersey, just the people in Oklahoma? Could
18 you do that data, if you were asked to?

19 MR. MARCHESE: Objection to form.

20 THE WITNESS: I would personally say
21 that that's not the right thing to do.

22 BY MS. McLAUGHLIN:

23 Q But could you?

24 A Well, you know, you have the data, you
25 could do anything with that data. So you could

1 clearly look at it in that fashion, if you want to;
2 but I would not agree that that's the right thing to
3 do.

4 Q So if we look back on Exhibit 2 and SQ
5 9 on page 26 -- or excuse me -- SQ 7 where you ask
6 what household appliances, gadgets, items they have.

7 The purpose of that question was to
8 make sure the person owned a clothes washing
9 machine, correct?

10 A That's correct.

11 Q And if they didn't own a washing
12 machine they were excluded from the survey?

13 A That's correct.

14 Q Did you do anything -- did you restrict
15 what type of clothes washing machine the participant
16 owned?

17 A I don't think that's necessary because
18 at the end of the day we are looking at the average
19 price premium or the value for the presence or the
20 absence of the logo. So I don't believe you need to
21 identify this at this stage.

22 Now, when we actually go in to
23 calculating the price premium we are doing it
24 specifically for Maytag and the class of machines
25 we're talking about. So over here, the screen-in is

1 anyone who owned a clothes washing machine.

2 Q I don't think you quite answered my
3 question. You did not screen out depending if they
4 owned a -- depending on type of washing machine they
5 owned?

6 A So my point is, I did not, but I also
7 did not have to do it because we are essentially
8 looking at understanding what the value of the
9 ENERGY STAR logo is.

10 Q I understand that.

11 Are you familiar with high-efficiency
12 front-loading washing machines, with what they are?

13 A Well, I'm not a technical expert, but
14 yes, in my -- I've seen HE and high-efficiency
15 energy machines.

16 Q Did you allow purchasers of
17 high-efficiency front-loading washing machines to
18 participate in your survey?

19 A I did. And I think you will see that
20 the price range that we take allows them to also
21 provide that input on the value of the ENERGY STAR
22 logo. I did not exclude them from the survey.

23 Q Do you know how many people who
24 participated in your survey owned HE front-loading
25 washing machines?

1 A So sitting here in the absence of
2 actually having the data in front of me, I don't
3 know exactly, but like I said, it's not necessary.
4 We look at the entire range of value that they
5 assigned to the presence or absence of the ENERGY
6 STAR logo and then we look at it with, you know, for
7 using formula 14, very specifically to those who are
8 likely to buy the Maytag machines. So it's not
9 necessary for us to. We have to actually include
10 that entire group and not exclude anyone in the
11 process.

12 Q Are purchasers of HE front-loading
13 washing machines comparable to purchasers of the
14 Maytag Centennial washers at issue?

15 MR. MARCHESE: Objection to form, lacks
16 foundation.

17 THE WITNESS: Well, sitting out here I
18 cannot say whether they are comparable or not
19 comparable. It doesn't matter to the -- to my
20 estimate or my opinion in this report. You do
21 have to take, as I mentioned, you do have to
22 include the universe of clothes washing
23 machine buyers, and you have to do that in
24 order to be able to see the entire group and
25 how they value -- the value estimate that goes

1 into formula 14 needs to take into account
2 those that are on both sides of the coin.

3 BY MS. McLAUGHLIN:

4 Q Can you explain that to me, why does
5 formula 14 require you to have both front-loading
6 purchasers and top-loading washers like the Maytag
7 Centennial machines at issue?

8 A If you look at it -- we talked about
9 the definition earlier on today, about what price
10 premium is all about. So with price premium you
11 really need to take into account how much of the
12 price for the Maytag machines you're going to
13 allocate due to the presence and absence of the
14 ENERGY STAR logo, taking into account both
15 demand-side factors and supply-side factors and so
16 on. So when you look at buyers, there are buyers of
17 different kinds, we don't know the -- you know,
18 exactly -- and what they value may vary depending
19 on, you know, what their budgets are and what
20 they're looking to do and so on. So in order to
21 take those demand-side factors, we do need to
22 include those buyers, and that's how it goes into
23 the formula 14.

24 Q Do you know how much, on average, an HE
25 front-loading machine retailed during the class

1 period?

2 MR. MARCHESE: Objection to form.

3 THE WITNESS: I don't recall an exact
4 number.

5 BY MS. McLAUGHLIN:

6 Q Could purchasers of high-efficiency
7 washers place a different value on the ENERGY STAR
8 logo than a purchaser of a traditional top-loading
9 machine, like the Maytag Centennial washers at
10 issue?

11 MR. MARCHESE: Objection, lacks
12 foundation.

13 THE WITNESS: So they could. They
14 could be all different. If you look at again
15 how we applied formula 14 and how we
16 restricted it to within the price range of the
17 Centennial washing machines, right, we took
18 into account 300 to \$500 range against a very
19 high \$700 range that we retested, and we
20 looked at the value of the dollars versus
21 looking at the value for the presence or
22 absence of the ENERGY STAR logo and applying
23 formula 14. So we did take into account in --
24 my calculation of price premium does take into
25 account specifically the Maytag Centennial

1 machine.

2 BY MS. McLAUGHLIN:

3 Q If your survey consisted of mostly
4 people who bought high-efficiency front-loading
5 washers generally retails for a lot more than the
6 400 average price here, couldn't that skew the
7 results of people caring more about an ENERGY STAR
8 rating than a person buying a traditional
9 top-loading washing machine?

10 A It will actually make my results a lot
11 more conservative, and the reason it will make my
12 results a lot more conservative is the value for a
13 dollar, for someone who is buying a \$700 machine in
14 that 300 to \$500 range the value for a dollar is a
15 lot less. And when I look at that in comparison to
16 the value for the EZ STAR logo, automatically I
17 would become -- you know, my price premium numbers
18 taking into account all the demand-side factors and
19 applying formula 14 correctly would make it a lot
20 lower than if I were to focus on the high-end
21 buyers.

22 Q Are you aware that Dr. Dennis'
23 contingent valuation survey focused on only owners
24 of top-loading washers?

25 A His method is very different and my

1 method is very different. My method does take --
2 does have to look at the whole buyer -- spectrum of
3 buyers. So the application of the contingent
4 valuation method I don't want to comment on. He
5 clearly did it the right way. He's an expert at it
6 and he's done it in the right way.

7 Q Are you familiar with -- are you
8 familiar with high-efficiency top-loading washing
9 machines?

10 A Well, you know, my being familiar with
11 them doesn't change the results. Have I -- I'm sure
12 in the course of my spending time in the retail
13 stores, looking at these machines I probably did see
14 one of those.

15 Q So you understand that they exist?

16 A So I'm sure they exist. I don't want
17 to make an absolute comment that every store, you
18 know, in the seven states carries it or doesn't
19 carry it, right, so I want to be careful about it.
20 But it doesn't affect or impact my opinion or the
21 results I presented here.

22 Q And do you understand that the Maytag
23 Centennial washers at issue are not high-efficiency
24 top-loading washing machines?

25 A I understand that, but it doesn't

1 impact, because as I said, you got to take
2 demand-side factors into consideration.

3 Q I know, you don't need to clarify. I
4 was just asking you if you are aware of that fact.

5 Now, did you allow purchasers of
6 high-efficiency top-loading washing machines to
7 participate in your survey?

8 A Can you repeat that question for me?

9 Q Did you allow purchasers of
10 high-efficiency top-loading washing machines to
11 participate in your survey?

12 A So we didn't exclude -- we didn't
13 exclude them. Clearly, in the conjoint methodology,
14 we want a fair representation of the buyers. The
15 conjoint methodology itself will ensure we have
16 attributes that talk about the -- again, I don't
17 have the list in front of me, there are attributes
18 that talk about front-loading versus top-loading.
19 There's also attributes that, if I recall, -- well,
20 so, you know, we would control for all of those
21 factors in coming up with how you would allocate the
22 price premium exclusively for the EZ STAR logo.

23 MR. MARCHESE: I think you just
24 misspoke. You said EZ STAR.

25 THE WITNESS: I'm sorry, Energy Star

1 logo, I apologize. ENERGY STAR logo. Forgive
2 me for that.

3 BY MS. McLAUGHLIN:

4 Q On page 12 of your survey, looking at
5 the last paragraph before Section D, ASEMAP, page
6 12, that last sentence before the ASEMAP section.
7 It says, I believe that respondents are
8 representative of the class of consumers who
9 purchased the Maytag Centennial clothes washing
10 machines.

11 Now, just to be clear, your survey
12 includes people who own any washing machine
13 whatsoever, correct?

14 A Yes, it does, but when I mean
15 representation, I mean that the group of people were
16 not excluded and so they were represented in the
17 sample as much as others because we need to
18 understand -- purely from a demand perspective we
19 want to be able to understand what's going on with
20 both groups of customers.

21 Q Now, I believe in your survey you
22 excluded anyone who purchased their washing machine
23 more than one year prior to taking the survey.

24 Is that correct?

25 A That's correct.

1 Q Why did you do the one-year limitation?

2 A Well, you know, different survey
3 researchers may use different criteria. I do
4 believe that given -- you know, we were looking to
5 have them to understand their preferences for
6 different attributes in how those drove their
7 purchase decisions. We needed -- and they had to
8 make those tradeoffs, right, so which ones they
9 would find more important, which ones less, and how
10 would one compare to the other was important for us
11 to look at those who had made a purchase in the last
12 12 months so that those preferences could be
13 elicited very correctly. You know, other survey
14 researchers for other purposes may take a longer
15 period, but for us we put that criteria in.

16 Q When did you conduct the survey? You
17 can always say a month.

18 A I can't remember now, but in the early
19 part of November or so.

20 Q So essentially people had to have
21 bought their washing machine anywhere from
22 November 2014ish to November 2015 to be able to
23 participate in your survey?

24 A Correct.

25 Q How long do people usually keep washing

1 machines for?

2 A No, again, I stated this in my report,
3 people keep washing machines for anywhere, five
4 years or more, the average life is probably
5 around -- somewhere around there.

6 Q So given that people had purchased
7 their washing machine sometime in the late 2014 to
8 2015, would you expect that there wouldn't be --
9 that would exclude many people who had actually
10 bought the washing machines at issue in this class
11 since those washing machines were sold in the 2009
12 to 2012 time period?

13 MR. MARCHESE: Objection to form.

14 THE WITNESS: No, not really because I
15 think if you look at it, you know, we
16 didn't -- we didn't exclude any of those
17 people who may have purchased it in 2009 and
18 who may have likely purchased it again, you
19 know, in 2014. And more importantly, you
20 know, the purpose of the survey in trying to
21 understand what their preferences were,
22 because keep in mind what we're trying to do
23 here is, you're trying to understand what
24 portion of the price they paid could be
25 allocated to the EZ STAR logo. So if you look

1 at the timeframe, you know you still may have
2 seen some of them who may have -- you know,
3 been part of the class at that time. But
4 that's really not the point for us. The point
5 for us here is to understand what the
6 preferences are and understand what value they
7 place on the presence or absence of the EZ
8 STAR logo.

9 BY MS. McLAUGHLIN:

10 Q If you turn back to deposition Exhibit
11 2, page 26, SQ 10 at the very bottom. It says,
12 Please indicate the brand/model of clothes washing
13 machine you have in your household.

14 I only see a list here of brands. Did
15 you not ask for specific models?

16 A Yeah, we did not ask for specific
17 models. Again, for us, understanding the value of
18 how much emphasis, you know, what is the value of
19 the EZ STAR logo, presence or absence of it in their
20 preference, it was enough to look at the Maytag and
21 then to apply that to the 300 to \$500 price range.

22 Q Again, I understand that. My question
23 was simply, you included the word "model" in the
24 question, and so I'm just wondering is that a typo.
25 Why would you include the word "model" when you just

1 list brands?

2 A Well, we listed brands because that's
3 all we -- you know, that was adequate. And then we
4 have the other -- some people may not remember the
5 brand, might remember the model, and clearly in the
6 other they could go in and specify if they want to
7 specify a model.

8 Q I want to turn back to your report. Go
9 to page 7 of your report. And under the summary of
10 the results and opinions section you say your
11 recommended estimate for price premium for the
12 ENERGY STAR logo is \$180.39; is that correct?

13 A That's correct.

14 Q So is it your opinion that the value of
15 the ENERGY STAR logo is \$180?

16 A It is my opinion that the price
17 premium, which is part of the price for Maytag
18 Centennial buyers, the price premium for the ENERGY
19 STAR logo is \$180.39.

20 Q So is it your opinion that any person
21 who bought a Maytag Centennial washer paid \$180 of
22 the purchase price toward the ENERGY STAR logo?

23 MR. MARCHESE: Objection to form.

24 THE WITNESS: Can you repeat that
25 question? There's a couple of things in

1 there.

2 BY MS. McLAUGHLIN:

3 Q Sure. Is it your opinion that anyone
4 who bought a Maytag Centennial washing machine, that
5 \$180 of the purchase price can be -- was allocated
6 to buying the logo itself?

7 A The price premium, which is defined as
8 the portion of the price, you know, a portion to the
9 ENERGY STAR logo, is \$180.39. So the answer to your
10 question would be yes.

11 Q And does that \$180 matter, regardless
12 of how much the total washing machine sold for?

13 A Could you explain the question a little
14 bit better for me?

15 Q Sure. You give the example -- I think
16 it's on page 8, the top of page 8 of your report.
17 It says, supposed washing machines with the ENERGY
18 STAR logo were currently priced at \$500. Holding
19 all else the same, supposed Maytag dropped the
20 ENERGY STAR logo, thereby making the product less
21 appealing to the market, the clothes machine price
22 would need to be reduced to \$319.

23 Now, does that \$180 apply if the washer
24 was priced at \$500 or if it's priced at your average
25 of \$400?

1 A So I think I mentioned this as well
2 that when you look at the value of a dollar, so
3 remember to calculate the price premium we had to
4 apply formula 14. We had to look at the value of
5 the ENERGY STAR logo being present versus not being
6 present, and then we also had to look at the value
7 of a dollar. We focused of the value of a dollar in
8 the 300 to \$500 range. So this price premium would
9 be applicable in that range. If you went to a
10 higher price point, then, you know, the value of the
11 dollar might be very different, and accordingly, the
12 price premium may change a little bit. But I would
13 expect it will still be in within that same range.

14 Q So if I bought a washing machine for
15 \$300, the price premium would be that \$180 amount,
16 correct?

17 A That's correct.

18 Q So is it your opinion that if Whirlpool
19 had continued selling the Maytag Centennial washers,
20 but took off the logo they needed to have reduced
21 their price by \$180?

22 A So if they wanted to keep the same
23 amount of unit sales as I pointed out, so they would
24 have to do -- reduce the value price premium they
25 would that have to produce their price at the retail

1 level.

2 Q So if Whirlpool was selling the washing
3 machine -- the ENERGY STAR labeled washing machine
4 for \$300, if they wanted to keep the same number of
5 units sold they would need to reduce the washing
6 machine to \$120 if they dropped the logo?

7 A If you used the same logic, you're
8 right, yeah.

9 Q Have you ever seen a washing machine
10 being sold for \$118, \$120, excuse me?

11 A You know, what obviously -- that's why
12 we take into account demand factors and so on in
13 coming up with the price premium. Now, whether a
14 manufacturer actually lowers the price that much or
15 not, may be driven by other factors like, you know,
16 looking at what retailer wants to decide, looking at
17 what the manufacturer decides. So clearly, you
18 know, the price premium is that \$180. The actual
19 price that they end up, and I think we had this
20 discussion earlier as well today, is something that,
21 you know, one would have to make a decision on.

22 Q But have you ever seen a washing
23 machine sold for \$120?

24 A Well, I've never been in the
25 marketplace to buy a washing machine at that -- at

1 lower range, but there are washing machines that are
2 in the \$200 range that potentially retailers might
3 discount.

4 Q Well, correct me if I'm wrong, you said
5 you went to a couple stores and you did a lot of
6 research as you were preparing your study into what
7 -- about the washing machine market; is that
8 correct?

9 A Yes, I did that.

10 Q Did you see any new washing machines
11 sold for the \$120 range?

12 A I can't recall if I did see something
13 on the shelf, but as you can see, that we did test
14 the price range all the way down to \$200, which is
15 very close in estimate to your \$120 mark that you're
16 talking about. So the range that we had, 200 to
17 700, would take into account models that would be at
18 that low end.

19 Q So based our survey results, would you
20 expect that any washing machine available for sale
21 during the class period that was similar to the
22 Maytag Centennial washers, but did not have the logo
23 on it, would you expect them to have sold for about
24 \$180 less than the washing machines at issue here?

25 MR. MARCHESE: Objection to form, lacks

1 foundation.

2 THE WITNESS: So again, the explanation
3 of price premium is that if you have a machine
4 that you're selling at \$300 with the ENERGY
5 STAR logo, and you decide you want to take out
6 the ENERGY STAR logo, then the price that you
7 charged for it, because again the premium,
8 according to the conjoint survey we did here,
9 the premium is \$180, the price you should
10 charge for it should be \$180 less. So it
11 would be as you pointed out. And my
12 expectation, therefore, would be that in order
13 to keep the same number of units, you know,
14 the decision, depending on whether it's the
15 manufacturer level or the retail level,
16 accordingly would be taken in order to
17 reflect -- in order to adjust for the removal
18 of the ENERGY STAR logo.

19 BY MS. McLAUGHLIN:

20 Q So you would expect those washers
21 without the logo to be about \$180 less expensive
22 than the Maytag Centennial with the logo?

23 MR. MARCHESE: Objection to form.

24 THE WITNESS: Again, going back to what
25 I said in terms of what does price premium

1 really mean, it's about, you know, keeping the
2 same number of units. And if you're going to
3 take out the ENERGY STAR logo, just as you
4 might say if you took a \$200 model which does
5 not have the ENERGY STAR logo and a
6 manufacturer decided to make it include the
7 ENERGY STAR logo, then they, in order to keep
8 the same number of units they would look at
9 increasing the price by \$180.

10 BY MS. McLAUGHLIN:

11 Q So you would expect if there's a
12 comparable washer but just didn't have the logo on
13 it, sold the same as the Maytag Centennial, it would
14 be priced about \$180 lower than the Maytag
15 Centennial washers?

16 MR. MARCHESE: Objection to form.

17 THE WITNESS: That's what the conjoint
18 survey and the price premium results would
19 suggest.

20 BY MS. McLAUGHLIN:

21 Q So it's a yes?

22 A Yes.

23 Q Now, which is a better indication of a
24 price premium, what actually occurs in the
25 marketplace or a conjoint analysis survey?

1 MR. MARCHESE: Objection to form.

2 THE WITNESS: So I would say that what
3 has been -- what has been done in the conjoint
4 survey is a true reflection of what value
5 consumers place on the ENERGY STAR logo, and
6 hence, the price premium associated with that.
7 What happens in the marketplace could be a
8 reflection of certain decisions that a
9 retailer may choose to make. And the conjoint
10 survey is a much better reflection of -- it is
11 probably the only -- you know, the \$180 that
12 we report here in my report, it is a clear way
13 to take the price and say how much of that
14 price would you allocate to the value being
15 delivered by the ENERGY STAR logo.

16 BY MS. McLAUGHLIN:

17 Q But if you had these two different
18 types of washing machines, two different washing
19 machines, one that has a logo, and one that does
20 not, everything else they're the same, and they sell
21 in the marketplace, sell the same number of units,
22 if they do not sell for \$180 less, does that mean
23 that the actual market data is a more accurate
24 indicator of what a price premium is on the logo?

25 MR. MARCHESE: Objection to form.

1 THE WITNESS: So the question you're
2 asking me is a very hypothetical question.
3 So, you know, that hypothetical question, as I
4 mentioned, has a number of different things
5 that might be going on. So, for example, and
6 again, as to your hypothetical question, with
7 all the assumptions I'm going to throw some
8 additional assumptions on there, which would
9 be, a retailer decides to have multiple models
10 in their line with the intent that the
11 consumer is looking at the real low price,
12 low-end model or least likely to buy it, given
13 other factors that might be going on, may be
14 looking to buy the one in the middle or the
15 one higher. So they may have other reasons
16 for why they may carry certain models. And
17 those are all assumptions and answers to your
18 hypothetical question I really wouldn't be
19 able to give you a definitive answer for it.

20 BY MS. McLAUGHLIN:

21 Q Do you know whether there were any
22 comparable top-loading washing machines without the
23 ENERGY STAR logo that was available in 2009 - 2010?

24 A I don't recall right now, but as I
25 said, I did make store trips and so on, and that

1 became the input. Conjoint is a very accepted
2 technique to understand price premium, to understand
3 what value, you know, a product is a combination of
4 all of these attributes, and to understand the price
5 premium in terms of how much would you allocate of
6 that price to the presence or absence of the ENERGY
7 STAR logo. This method doesn't change. The results
8 of this method doesn't change, based on the question
9 you just asked.

10 Q Would you be interested in knowing what
11 a comparable non-ENERGY STAR washing machine sold
12 for, on average, in 2009 and 2010? Would that be
13 interesting to you?

14 MR. MARCHESE: Objection to form.

15 THE WITNESS: It wouldn't change the
16 conclusions of my survey. It wouldn't have
17 changed the conclusions or my opinions in my
18 report.

19 MR. MARCHESE: Allison, we've been
20 going for about an hour, can we take a quick
21 break?

22 MS. McLAUGHLIN: Yeah, that would be
23 great.

24 VIDEO OPERATOR: Going off the record,
25 2:28.

1 This is the end of disc 4 in the
2 deposition of Dr. Sukumar.

3 (Brief recess.)

4 VIDEO OPERATOR: Going back on the
5 record at 2:41 p.m.

6 This is the beginning of disc 5, in the
7 deposition of Dr. Sukumar.

8 BY MS. McLAUGHLIN:

9 Q Dr. Sukumar, what is a choice-based
10 conjoint survey?

11 A A choice-based conjoint survey is --
12 first it's a software that is made by a company
13 called Sawtooth Software. Next, it looks at giving
14 a combination of six or seven attributes and allows
15 you to compare, you know, two different combinations
16 of these attributes and asks the respondent to
17 choose either one of them, or not choose any of
18 them. The problem with choice-based conjoint is
19 that, in the instance that we have here, it's not
20 the right method to use because you can't go more
21 than five or six attributes. It's a
22 high-involvement choice and the number of attributes
23 become too cumbersome to read or look at and that's
24 information overload in the process.

25 Q Again, can I just remind you to just

1 answer my questions. And I can ask followup
2 questions or your lawyer can ask questions later if
3 I have not answered it.

4 Would you agree that choice-based is
5 the most commonly used type of conjoint survey?

6 MR. MARCHESE: Objection to form.

7 THE WITNESS: Choice-based conjoint is
8 used when you have just about five or six
9 attributes. It's not the most commonly used
10 as other methods. ASEMAP is a well-validated
11 method that is used. There's other techniques
12 like MaxDiff and adaptive conjoint analysis.

13 BY MS. McLAUGHLIN:

14 Q According to Sawtooth Software,
15 80 percent of all conjoint surveys are choice-based.
16 Does that surprise you? Do you have any reason to
17 disagree with that?

18 A The applicability of choice-based
19 conjoint is limited more so, for example, you only
20 have four or five attributes and you're really
21 looking at it more from the context of
22 understanding, let's say, willingness to pay. And
23 there's a lot, as you can see in Professor
24 Srinivasan's paper, the Netzer and Srinivasan paper,
25 when you have a much larger number of attributes

1 ASEMAP is the right technique to use.

2 Q I'm going to move to strike that as
3 nonresponsive.

4 My question was: According to Sawtooth
5 Software, 80 percent of all conjoint surveys are
6 choice based.

7 Do you disagree with that?

8 MR. MARCHESE: Objection, assumes facts
9 not in evidence.

10 THE WITNESS: I disagree with that
11 because the context in which those
12 choice-based conjoints are done are very
13 different than the context in which, you know,
14 the understanding of what the attributes are
15 in the choice of a washing machine, clothes
16 washing machine needs to be considered.

17 BY MS. McLAUGHLIN:

18 Q On page 5 of your report you say, There
19 are more than 18,000 conjoint projects done each
20 year.

21 Are you saying that most of those are
22 not in the choice-based context realm?

23 A There are other types of conjoint
24 techniques other than the use of choice-based
25 conjoint. For example, discrete choice is something

1 that people may do again for a similar -- fewer
2 attributes, five or six attributes, but where brand
3 is an important consideration as well. There's ACA,
4 adaptive conjoint analysis, there's a full profile
5 conjoint analysis. So in the context that we have
6 done here, because of the large number of
7 attributes, ASEMAP is the most appropriate technique
8 to use.

9 Q I understand you believe that ASEMAP is
10 the most appropriate. So that, I understand it.
11 What I want to know, are you disagreeing with the
12 fact that choice-based is a very commonly used
13 method of conjoint analysis?

14 A I don't have -- there are no facts here
15 as to how many times choice base -- you know, of
16 that 18,000 projects, how many times choice-based
17 conjoint has been used. So I want to qualify my
18 answer and make sure you understand that in -- that
19 choice-based conjoint is used in a certain context.

20 Q I understand. But it's commonly used
21 by marketing researchers?

22 A Well, again, the definition of
23 "commonly used" for -- is a very generic statement
24 and for me it's, you know, the context in which it
25 is being used is very important.

1 Q Would you agree that choice-based
2 conjoint has been largely accepted in the marketing
3 research community as a respectable method?

4 A Well, for experts who use choice-based
5 conjoint analysis, they will tell you what the
6 issues are, and therefore, my answer to you is it is
7 widely used, has to be clearly understood in the
8 context of where it is being used.

9 Q Choice-based conjoint is based on the
10 well-based Bayesian statistical procedure; is it
11 not?

12 A So again, the Bayesian procedures are
13 only used for obtaining the part-worth utilities.
14 There is a step before that, and that step before
15 that is where the choice-based conjoint, whether
16 it's appropriate or not needs to be decided upon.
17 The step before that is the one that where you look
18 at the number of attributes and you look at what the
19 problem is that you're trying to study. The
20 Bayesian approach is simply a statistical technique
21 to help estimate the part-worth utilities once you
22 have collected that first step data.

23 Q Would you agree that Bayesian methods
24 are known to be consistent?

25 A What do you mean by "consistent"? Can

1 you give me some clarification on that?

2 Q They have excellent sampling
3 properties.

4 A I don't understand what you mean by
5 "sampling properties," but I do know that Bayesian
6 techniques, if not applied correctly, and very
7 oftentimes it will yield confidence intervals that
8 are very large, meaning the utilities that you
9 calculate can give you very broad estimates for, you
10 know, the value that you're applying for any
11 particular attribute that is used in there.

12 Q What is a partial profile conjoint?

13 A So a partial profile conjoint is where,
14 if you had 10 attributes, you may only show four of
15 those selected and you need to design an
16 experimental design in order to be able to expose a
17 large number of respondents to some set of those
18 partial attributes. The partial profile conjoint is
19 made up of a partial set of attributes as compared
20 to ASEMAP, where all of the 19 attributes are shown
21 to the respondents.

22 Q Does a partial profile conjoint allow
23 you to use literally dozens of different product
24 features or attributes?

25 A Now, -- so I'll answer this question a

1 little long just so you understand. Partial profile
2 conjoint has been shown in the paper by Srinivasan
3 and Netzer to be one that when you look at
4 predicting the value of an attribute to perform
5 poorly as compared to ASEMAP.

6 Q But that still doesn't answer my
7 question.

8 Can you use the partial profile
9 conjoint to use dozens of different product
10 features?

11 A I would say you should not use it
12 because of its lack of ability to predict the value
13 correctly.

14 Q But you can?

15 A That would be an incorrect choice or
16 methodology.

17 Q But you can?

18 MR. MARCHESE: Objection to form.

19 THE WITNESS: You know, if it were my
20 work, I would prefer not to use it.

21 BY MS. McLAUGHLIN:

22 Q Is ASEMAP widely used as a conjoint
23 survey method?

24 A ASEMAP has been published in a
25 peer-reviewed journal and it is used extensively in

1 a number of different engagements. My company has
2 proprietary access to the software, and obviously we
3 use it very extensively in a number of different
4 engagements.

5 Q Outside of your company, is it used
6 extensively as a conjoint method?

7 A I'm not familiar with whether Professor
8 Srinivasan has, and I'm not privy to that, but
9 others use ASEMAP; but I can tell you that we use it
10 very extensively.

11 Q So the answer is, you don't know
12 whether ASEMAP is used widely outside of your own
13 company?

14 A Well, if you look at, you know, I've
15 used ASEMAP in multiple litigation cases and it's
16 been accepted Professor Srinivasan has used it in
17 legal cases, and very well recognized and accepted.
18 It's a -- it's published and received an award
19 created by the very faculty member who is considered
20 the father of conjoint analysis. So it doesn't
21 matter whether someone else uses it, it's a question
22 really, the fact that it is very widely recognized,
23 accepted, shown in legal settings as well as, you
24 know, my company, Optimal Strategix, Group, does use
25 it extensively in a number of instances.

1 Q But you still not have not answered my
2 question is whether you know if it's been widely
3 used outside of your company.

4 A I may not know, but that doesn't change
5 my answer; yep.

6 Q You don't know, that's all I was
7 asking. A very simple answer.

8 A Okay.

9 Q So in your report you say 18,000
10 conjoint projects are conducted worldwide each year.
11 You don't know how many of those are done using the
12 ASEMAP method; is that correct?

13 A I wouldn't be able to estimate that for
14 you.

15 (Adaptive Self-Explication of
16 Multi-Attribute Preferences Paper was marked
17 RS-3 for identification.)

18 BY MS. McLAUGHLIN:

19 Q The court reporter has just handed you
20 what she has marked as Exhibit RS-2. What is this?

21 A This is the --

22 MR. MARCHESE: I'm sorry. Is this RS-2
23 or RS-3?

24 MS. McLAUGHLIN: You are correct, I
25 believe it is RS-3. Thank you.

1 BY MS. McLAUGHLIN:

2 Q Continue, Dr. Sukumar.

3 A This is the paper published by
4 Professor Srinivasan and Netzer in the Journal of
5 Marketing Research and American Marketing
6 Association's publication, you know, for which he
7 received many awards.

8 Q And this is the article that you rely
9 on in deciding to use ASEMAP; is that correct?

10 MR. MARCHESE: Objection to form.

11 THE WITNESS: Well, my own experience
12 with it dates to before this article actually
13 showed up in print.

14 BY MS. McLAUGHLIN:

15 Q Let me ask you that: When did ASEMAP
16 come out? When was it first used?

17 A It was first used in -- I can't
18 remember the exact date, but somewhere around 2003
19 and 2004.

20 Q Are there any other articles that
21 analyze ASEMAP?

22 A Well, post this publication I can't
23 recall. There have been other papers written by
24 Professor Srinivasan about the self-explication
25 methods in conjoint. I can't remember exactly any

1 recent publications.

2 Q So Dr. Srinivasan, he developed ASEMAP;
3 is that correct?

4 A That is correct.

5 Q And he owns its proprietary software,
6 does he not?

7 A Yes.

8 Q And he owns that software, correct?

9 A That's correct.

10 Q Has anyone other than Dr. Srinivasan
11 written about ASEMAP and its reliability as a survey
12 method?

13 A I know this paper has received a lot of
14 awards. It's been peer reviewed by faculty
15 colleagues of Professor Srinivasan, who as I
16 mentioned is considered the very person who brought
17 conjoint analysis to marketing.

18 Q I understand that, but you're not
19 answering my question.

20 A My point is that I can't -- sitting out
21 here, I don't remember, but the very fact that this
22 method has been used in so many different
23 engagements, legal engagements, has been accepted in
24 other courts as well as being a very valid
25 technique.

1 Q But you don't know how often it's been
2 used outside of the context of your own company,
3 correct?

4 A As I said, it's a seminal piece. So I
5 don't know the answer to your question.

6 Q You don't know. That's all I'm asking
7 for.

8 Now, this article is published in the
9 Journal of Marketing Research; is that correct?

10 A That's correct.

11 Q Is this recognized as a statistics
12 journal?

13 MR. MARCHESE: Objection to form.

14 THE WITNESS: So I'm not sure what you
15 mean by a statistics journal, but the Journal
16 of Marketing Research is a peer-reviewed
17 publication, published by the American
18 Marketing Association, and most of -- all of
19 its papers that are published have very
20 detailed, you know, statistical analysis and
21 conclusions and statistical models that are
22 used, just like in this paper.

23 BY MS. McLAUGHLIN:

24 Q So is the Journal of Marketing Research
25 recognized by statisticians as a statistical

1 journal?

2 MR. MARCHESE: Objection to form, lacks
3 foundation.

4 THE WITNESS: Statisticians who may
5 have a -- you know, may be on the faculty on
6 statistics who also published in this journal
7 and so I'm not sure I completely understand
8 the question and the assumptions around that
9 question you're asking me.

10 BY MS. McLAUGHLIN:

11 Q Is the Journal of Marketing Research
12 recognized as an economics journal?

13 MR. MARCHESE: Objection to form.

14 THE WITNESS: Well, this journal is
15 published by the American Marketing
16 Association. Economic -- economists have
17 published in this journal, economic theories
18 have been published in this journal. You
19 know, for the purposes of my report, where I'm
20 looking at an opinion on calculating price
21 premium in the use of conjoint service,
22 there's been a lot of seminal pieces that have
23 been published in this particular journal over
24 the many years.

25

1 BY MS. McLAUGHLIN:

2 Q Again, I understand that, but you
3 didn't answer. Is this recognized as an economics
4 journal?

5 MR. MARCHESE: Objection to form.

6 THE WITNESS: I would like
7 clarification on what do you mean by
8 "recognized as an economics journal." It's
9 not published by the American Economic
10 Association. It's published by the American
11 Marketing Association. Whereas, I mentioned
12 economists have published their papers in this
13 particular journal.

14 BY MS. McLAUGHLIN:

15 Q Do you consider it an economics
16 journal?

17 MR. MARCHESE: Objection to form.

18 THE WITNESS: Well, it's got economic
19 -- economists publishing. It's got
20 economics-related publications in it. It's
21 one of the most leading journals published by
22 the American Marketing Association. If you
23 ask me is that information enough to consider
24 it as an economics journal, I would say yes.
25

1 BY MS. McLAUGHLIN:

2 Q Is there any reason to believe that any
3 procedure specified in the Journal of Marketing
4 Research adheres to the scientific standards imposed
5 by the statistics profession?

6 MR. MARCHESE: Objection to form.

7 THE WITNESS: Could you repeat that
8 question for me?

9 MS. McLAUGHLIN: Could you read it
10 back?

11 (At which time the following question
12 was read back by the reporter:

13 "Question: Is there any reason to
14 believe that any procedure specified in the
15 Journal of Marketing Research adheres to the
16 scientific standards imposed by the statistics
17 profession?")

18 MR. MARCHESE: Objection to form.

19 THE WITNESS: Could you help me
20 rephrase that question a little bit?

21 BY MS. McLAUGHLIN:

22 Q Do you know -- does any procedure
23 specified in the Journal of Marketing Research --
24 let me start again.

25 How does the Journal of Marketing

1 Research adhere to the scientific standards imposed
2 by the statistics profession; do you know?

3 MR. MARCHESE: Objection, form.

4 THE WITNESS: Well, again, there's just
5 many parts in there -- I'll give you an
6 answer. As an academic myself many years ago,
7 publications that were sent to this particular
8 journal adhered to the highest levels of
9 statistical sciences. In fact, if you look at
10 the editorial board, there are people who are
11 statisticians by their affiliation to the
12 department of statistics, and I believe, you
13 know, based on my own expert judgment, and as
14 well as being a former academic, that the
15 publications adhere to the highest statistical
16 sciences.

17 BY MS. McLAUGHLIN:

18 Q You said earlier that ASEMAP is a
19 proprietary program, right? So could I inspect the
20 computer code for ASEMAP?

21 A You will need to reach out to Professor
22 Srinivasan and get a license out of that and get
23 access to the code.

24 Q How much does a license cost?

25 A That's a question I would ask you to

1 take to Professor Srinivasan because what I have is
2 confidential and I can't share it with you.

3 Q But your firm pays money, right, to
4 have a license for ASEMAP; is that correct?

5 A That's correct.

6 Q But you're not able to share with me
7 how much you pay to use ASEMAP?

8 A I have a confidentiality agreement with
9 Professor Srinivasan.

10 Q What does it mean for a statistical
11 procedure to be called inconsistent?

12 MR. MARCHESE: Objection to form.

13 THE WITNESS: It's a very broad
14 question you're asking. I'm not sure I can
15 answer that question.

16 BY MS. McLAUGHLIN:

17 Q So you don't know what it means for a
18 statistical procedure to be called inconsistent?
19 You can't answer that?

20 MR. MARCHESE: Objection to form.

21 THE WITNESS: I can't answer the
22 question as it is very broad for me.

23 BY MS. McLAUGHLIN:

24 Q Do you know if Srinivasan and Netzer in
25 this article do anything to establish that ASEMAP is

1 consistent?

2 A Again, going back to my previous
3 answer, the term "consistent" or "inconsistent" is
4 something that I'd like for you to define better.

5 Q Okay. I'll define it. But
6 inconsistent means that there's no assurance that
7 this procedure will eventually recover the true
8 parameters even with an infinite amount of data.

9 A Could you repeat that again for me?

10 MS. McLAUGHLIN: Could you read that
11 back, please?

12 (At which time the following question
13 was read back by the reporter:

14 "Question: But inconsistent means that
15 there's no assurance that this procedure will
16 eventually recover the true parameters even
17 with an infinite amount of data.")

18 MR. MARCHESE: Is there a question
19 pending?

20 BY MS. McLAUGHLIN:

21 Q Based on that definition, isn't it true
22 that Netzer and Srinivasan do nothing to establish
23 that ASEMAP is consistent?

24 A Well, I don't agree with that. I think
25 consistency -- you know, just to give you an

1 immediate evidence of consistency is to look at the
2 44.3 percent of the price -- the price premium
3 calculated here on the basis of the preferences and
4 compare that to a totally different approach that
5 Dr. Dennis used in getting answers that are very
6 similar is a good example of consistency.

7 Now, academic literature, you know, I
8 can't recall exactly right now from the top of my
9 mind here as to whether there is a paper that says,
10 taking your definition of inconsistency, whether
11 they come back and actually demonstrate that.

12 Now, I make one more comment related to
13 what you just said. This paper demonstrates that by
14 using different methods and, you know, uses adaptive
15 conjoint analysis, uses another method published by
16 Professor Hauser, and essentially proves that ASEMAP
17 is predicably more accurate. It also shows that,
18 you know, in terms of certain, in terms of
19 recovering those preferences it does have certain
20 validations in there that show the consistency of
21 the methodology, per your definition.

22 Q How long has Dr. Srinivasan been your
23 chief research advisor?

24 A I can't recall the exact date, but he's
25 been someone I've known for many years in my

1 academic life. He's an expert. He's considered the
2 father of conjoint analysis. And as my chief
3 research adviser I want to say probably based to
4 somewhere around the summer of 2009 and 2010, that
5 he probably joined us in that capacity.

6 Q So before this article came out?

7 A Likely the case, yes.

8 Q Dr. Srinivasan's article, which is
9 Exhibit No. 3, was published in February 2011. So
10 you believe he was your chief research advisor prior
11 to that date?

12 A I want to say yes, but in the absence
13 of the actual, you know, details, yeah.

14 Q Understood. And how many times have
15 you used ASEMAP in litigation?

16 A I've used it four or five times.
17 Again, I can't remember the exact count. I've used
18 it in other, similar class action lawsuits as well,
19 without going into any other details due to
20 confidentiality.

21 Q How many other similar class actions?

22 A At least one. And then there's others
23 that have the same kind of issue, but are not a
24 class action, that I haven't been as yet announced
25 as the expert to the opposing; and there's

1 confidentiality associated with it.

2 Q And in that one class action, without
3 divulging any confidences, what was the nature of
4 your survey?

5 MR. MARCHESE: Objection to form.

6 THE WITNESS: It was a conjoint survey.
7 It looked at price premium.

8 BY MS. McLAUGHLIN:

9 Q Associated with a product, with a logo?
10 I mean, you can divulge a little more than it was a
11 conjoint.

12 A Obviously a product, and associated
13 with claims made on the product. You know, looking
14 backward to claims that were made in the past.

15 Q And when was that survey done?

16 A That survey was done sometime in
17 December of last year.

18 Q When was the first time you used ASEMAP
19 for litigation purposes?

20 A I want to say somewhere around 2011
21 where Professor Srinivasan testified in these cases
22 as the expert. My company used the methodology to
23 conduct the conjoint survey.

24 Q And in that class action litigation,
25 have you yet been disclosed as the expert?

1 A I have been disclosed as an expert.

2 Q And you've issued a report in that
3 case?

4 A That's correct.

5 Q And what is the name of that case?

6 A It's class versus Scotts EZ Seed.

7 Q Scotts EZ Seed?

8 A Yes.

9 Q And what is the product?

10 A It's a grass seed.

11 Q And in that case you also found a price
12 premium associated with some aspect of that grass
13 seed?

14 A Now I'm kind of getting closer to my
15 confidentiality issues. I would prefer not to go
16 into it.

17 Q Now, your survey, and the survey
18 mentions that you included 19 attributes and you've
19 discussed that several times today. How did you go
20 about selecting those 19 attributes?

21 A So we -- you know, it ranged from
22 making store visits, looking at Consumer Reports,
23 conducting focus groups and getting all of that
24 input, looking at online retailers and also looking
25 at the retail sales data, the Sears, Fry's, Home

1 Depot, Lowe's, that retail sales data as well was
2 included.

3 Q How does the retail sales data indicate
4 the 19 attributes that you selected?

5 A Price is an attribute.

6 Q And what online retailers did you
7 visit?

8 A I visited Home Depot, Lowe's. I also
9 looked at some of the flyers that were put in the
10 newspapers.

11 Q And what was the purpose of looking at
12 the flyers?

13 A Again, the purpose was to come up with
14 a list of attributes and levels in order to design
15 the conjoint survey.

16 Q If you look at page 9 of your report,
17 under Survey Design, the last sentence, The goal of
18 featured selection was to include features that
19 would adequately mask which features were of a
20 particular interest and to make the overall survey
21 to appear to a survey respondent to include features
22 that might plausibly be considered in selecting a
23 clothes washing machine. And they range from very
24 important to less important.

25 So is it that the purpose of including

1 attributes, outside of the ENERGY STAR, was just to
2 mask what the survey was getting at?

3 A Well, that's one of the reasons.

4 Q Okay. What are the other reasons?

5 A So, obviously, you do want to include,
6 you know, some attributes that are likely to be more
7 important than the ENERGY STAR logo and some
8 attributes that are less likely to be important than
9 the ENERGY STAR logo. Again, in terms of the
10 purchaser's decision. And you also wanted to make
11 sure that the list is something that is reflective
12 of what consumers have said in the focus groups, and
13 it does include things that have a whole range of
14 attributes that people would consider.

15 Q So if your goal is to have -- to mask
16 what the key attribute is, that's what you're trying
17 to get at and you want some more important and some
18 less important, why do you need 19? Why not 10?
19 Why 19?

20 A Again, you don't want to leave out
21 certain things that are likely to be important. You
22 don't want to leave out certain things that, you
23 know, consumers have expressed in a focus group.
24 And, you know, you want to be able to comprehensive,
25 that a conjoint survey does take into account, you

1 know, what's the value of the ENERGY STAR logo and
2 what's the price premium that people are paying.

3 Now, if I focused it only on, let's say
4 five attributes, there actually would be an upward
5 bias on the ENERGY STAR logo price premium simply
6 because now, you know, it's in the context of two
7 attributes that are a little more important than it,
8 two attributes that are less important than it. And
9 so the price premium that you would end up
10 allocating as part of the price paid would have an
11 automatic higher number than what the real number
12 should be.

13 Q Now, you also say, on page 19, above
14 the sentence that I read to you, that there is no
15 necessity to include all relevant or important
16 features.

17 MR. MARCHESE: This is page 19?

18 MS. McLAUGHLIN: Nine. I apologize.

19 You can tell it's getting late in the day.

20 THE WITNESS: So, yeah, I mean, there
21 are other features that are extremely small,
22 you know, that need not be included. And so
23 you don't -- you might end up with certain
24 computer types of configurations on washing
25 machines that, in the big scheme of things,

1 consumers haven't identified it. They may be
2 available, they may be in the product itself.
3 So there's no need -- so as long as we heard
4 these features being described in the focus
5 group, or as long as we saw these features
6 described in Consumer Reports, because that
7 would suggest, or in the store, that would
8 suggest that consumers that are considering to
9 buy this product are likely to look at those
10 particular features. We want to include
11 those.

12 BY MS. McLAUGHLIN:

13 Q Do Consumer Reports -- back up. You
14 considered the 2008 Consumer Reports Buying Guide,
15 correct?

16 A Yes, because that's more relevance to
17 looking at that in terms of coming up with this list
18 of features.

19 Q Do the Consumer Reports 2015 Buying
20 Guide include 15 different attributes in their
21 charts of washing machines?

22 A No. I don't remember exactly how much
23 they had, but there's a fairly good number of
24 attributes that are there that are included here,
25 and if you look across different models you would

1 see that some of them may be described differently
2 in the Consumer Reports, and we would have included
3 them because again they're being highlighted or
4 called out, and then when we did the focus groups
5 again they're being mentioned by consumers. So we
6 wanted to be reflective of things that really
7 mattered to shoppers of clothes washing machines.

8 Q When did you conduct your focus groups?

9 A I don't remember the exact date, but I
10 want to say sometime towards the end of October or
11 so before -- well before the final online survey was
12 launched.

13 Q Did you have a draft of the survey
14 completed before the focus group?

15 A I don't believe that's the right
16 process to follow. The right process to follow
17 would be to have a discussion guide that my expert
18 moderator uses to -- and that was included as part
19 of the exhibits, as discussion questions to allow
20 focus group participants to be able to come out and
21 say, here are things I considered, this is what
22 mattered to me, et cetera.

23 Q So again, you didn't answer my
24 question.

25 Did you have a draft of the survey

1 completed before you had your focus group? Or don't
2 you remember?

3 A So again, you know, I think it
4 doesn't -- it doesn't impact the focus -- in terms
5 of the actual process, the focus group is where a
6 lot of some of the inputs come in. So the answer to
7 your question would be that, well, it doesn't
8 matter, and I don't recall exactly whether
9 something -- a draft was created. The inputs from
10 the moderator in the focus group helped shape the
11 attributes and levels and the way we described these
12 as we complete the survey.

13 Q In what way did they help shape your
14 attributes and levels in the survey?

15 A So the expert moderator -- because
16 these focus groups are not conclusive evidence, the
17 expert moderator briefs me in terms of attributes
18 that are features that were discussed in the focus
19 groups.

20 Can we take a short bio break?

21 Q Can we finish the question that we're
22 discussing. Were you finished with your answer?

23 A Yeah, I'm finished with my answer.

24 Q All right. Sure, we can take a
25 five-minute break.

1 VIDEO OPERATOR: Off the record,

2 3:22 p.m.

3 (Brief recess.)

4 VIDEO OPERATOR: Going back on the
5 record, 3:36 p.m. This is the beginning of
6 disc 6 of the deposition of Dr. Sukumar.

7 BY MS. McLAUGHLIN:

8 Q Dr. Sukumar, before our break we were
9 discussing your focus groups that you conducted
10 before the survey. And you mentioned your expert
11 moderator. Who was that?

12 A I have moderators on my staff. They're
13 well-trained. And I can't recall the exact person,
14 but there's, you know, there's a couple of them.
15 Shannon Skalski. It could be Barbara Johnson. I
16 don't remember the exact names.

17 Q And there were two focus groups
18 conducted for this survey; is that right?

19 A That's correct.

20 Q Was it the same moderator for both of
21 them?

22 A Yes, typically we would use the same
23 moderator for both of them.

24 Q Were those focus groups on the same
25 day?

1 A I don't recall exactly, but it doesn't
2 really matter if they're on the same day or a
3 different day. Depending on facilities being
4 available.

5 MR. MARCHESE: Just keep your voice up,
6 please.

7 THE WITNESS: Sure.

8 BY MS. McLAUGHLIN:

9 Q Did you attend either of the focus
10 groups?

11 A It's not a common practice for me to
12 attend these focus groups. Again, you know, as I
13 pointed out earlier, the focus groups are not meant
14 to be conclusive and I get debriefed by my moderator
15 as to what kind of attributes were considered or
16 discussed.

17 Q What are the backgrounds of your
18 moderators?

19 A You know, they're all well-trained.
20 They've done many focus groups, as well as
21 one-on-one interviews, in-depth interviews with
22 consumers, as well as in other areas. I can tell
23 you that, you know, they are qualified. And exact
24 details are hard for me to, you know, kind of
25 reflect on it right now.

1 Q Did moderators take any notes at the
2 focus group?

3 A Well, if you look at focus groups,
4 they're not conclusive. So we ask moderators not to
5 take any notes because that becomes making it look
6 like it's conclusive. It's not conclusive. So they
7 typically debrief me on what they heard and what are
8 the different attributes that they consider. They
9 typically debrief me on that.

10 Q Did you record the focus groups in any
11 way?

12 A We did not record the focus groups.

13 Q So no video, no audio recording?

14 A No.

15 Q And did you take any notes? Well, let
16 me back up. How are you debriefed after the focus
17 groups?

18 A My moderators would either meet me in
19 person or call me, and we would have a discussion
20 around what they heard and would list out the
21 various attributes that were considered because
22 that's kind of critical for us to build and develop
23 here into the conjoint survey. And that's how they
24 would typically debrief me on it.

25 Q Would your moderator type up notes

1 after or record their impressions after the focus
2 group?

3 A You know, it's common practice for --
4 because the focus groups are not conclusive, and a
5 very sound methodology is essentially to not have
6 those notes turned over or any record kept of it
7 because these are not -- I don't want them as very
8 conclusive evidence. These are all exploratory
9 focus groups. And, you know, my moderators just
10 debrief me. It's a very common procedure for
11 moderators to debrief on what was the list of
12 attributes and features that were discussed.

13 Q Did I understand you to say that you
14 think it's improper to record any sort of
15 impressions or notes after the debrief. Is that
16 essentially what you said?

17 MR. MARCHESE: Objection to form.

18 THE WITNESS: So I don't have any notes
19 from the moderators. I've been debriefed, and
20 that's really what I need for my design of the
21 methodology and design of the online survey,
22 because the online survey is the more
23 conclusive approach and methodology, and I've
24 just been debriefed by my moderators.

25 BY MS. McLAUGHLIN:

1 Q So let me make sure I get it correctly.
2 The moderator does not take any notes during the
3 focus group, correct?

4 A Well, typically they would not because,
5 again, they have a discussion guide and they're
6 trying to get focus group participants to speak up
7 and talk about, you know, what they considered in
8 making a purchase.

9 Q So the answer is no, they do not take
10 notes during it?

11 A And it's really not necessary.

12 Q And they don't take notes after -- they
13 don't type up any of their recollections so they
14 don't forget, they don't take any recording after
15 the focus group?

16 A They typically give me a debrief fairly
17 quickly.

18 Q How quickly?

19 A You know, it would have been literally
20 the day after the focus groups are done.

21 Q Do you take any notes during the
22 debriefing?

23 A I would typically enter it into my
24 Excel spreadsheet, which is part of my exhibit that
25 you have. It's not notes, but it's really crafting

1 the attributes in levels, and they're part of my
2 exhibits, and those get, you know, edited with all
3 the other information that I would have reviewed,
4 whether it's the Consumer Reports or, you know, the
5 store visits, et cetera, and I would edit that and
6 use that for the complete design of my survey.

7 Q So I want to make sure I understand
8 what document you were just talking about.

9 And I think this is it, but I want you
10 to tell me.

11 (Exhibit 3 (List of Attributes &
12 Levels), 18 - 21 was marked RS-4 for
13 identification.)

14 BY MS. McLAUGHLIN:

15 Q The court reporter has just handed you
16 what has been marked as Exhibit 4. What is this?

17 A This is a list of attributes and levels
18 that I had included in my report that is the input
19 that went into the conjoint survey.

20 Q Is this the spreadsheet that you were
21 just mentioning?

22 A Yeah, this is, you know, basically what
23 I would have captured, the debrief from the
24 moderator, but edited it to reflect all the other
25 inputs to get a final form of it.

1 Q Do you have that version of the
2 spreadsheet that you created after your debriefing?
3 Did you keep that?

4 A No, this is the final version.

5 Q So you saved -- this is something that
6 was saved over that version?

7 A Yes. Again, it doesn't change. This
8 is the process I follow. This has been the process
9 that we follow for all our legal cases as well.
10 This is where the final edits are done and stored
11 and used as part of the inputs that go into the
12 ASEMAP conjoint survey.

13 Q I understand that, but if I wanted to
14 know what attributes you discussed at the focus
15 group, there would not be a document representing
16 just those discussions, would there?

17 A It would not be necessary to do that
18 because, again, this is the -- what I need is this
19 input that goes into my survey.

20 Q Again, you are not answering my
21 question. My question was not whether you need it,
22 my question is if I was interested in seeing what
23 attributes were discussed at the focus group and
24 what you took notes on into a spreadsheet, that
25 document would not exist; is that correct?

1 A Well, what I'm saying is that that
2 document in its final shape is right here in front
3 of you in this particular exhibit. And the inputs
4 have been captured, and along with all the other
5 information, this is the final form of that
6 document.

7 Q But the form of the document right
8 after your debriefing does not exist?

9 A It's morphed into this.

10 Q So yes, it does not exist.

11 A Yes.

12 Q Thank you.

13 (Exhibit 2 (Focus Group Screener &
14 Discussion Guide) 7 - 17 was marked RS-5 for
15 identification.)

16 BY MS. McLAUGHLIN:

17 Q Dr. Sukumar, the court reporter has
18 just handed you what has been marked as RS-5. Can
19 you tell me what this is?

20 A This is, you know, again, the screening
21 criteria that was used to recruit participants into
22 the focus group and then a discussion guide that I
23 drafted to -- and gave to the moderators -- the
24 moderator, the expert moderator that did the focus
25 groups, and the discussion guide is a free-flowing

1 set of questions which, again, is not read in this
2 format. It's meant to just be a guide to help to
3 facilitate the moderator's questioning in the focus
4 groups.

5 Q When you started -- when you put in
6 notes in the Excel spreadsheet that's now become
7 Exhibit 4 to this deposition, did you already have a
8 list of possible attributes laid out and did you add
9 to it or was the focus group the first step in
10 determining what attributes to include?

11 A So, you know, I would say the
12 following, which is that if you look at even the
13 focus group discussion guide here there are some
14 suggestive probes to see if these things came in
15 just as a discussion guide. It's possible that I
16 had that in an initial draft, but more importantly,
17 you know, what it has morphed into is the ability to
18 take all of the other inputs that are coming in and
19 to creating that final form.

20 Q And how did that final form change
21 based on what was learned at the focus group -- from
22 the focus groups?

23 A There's a variety of discussion. Some
24 of the things that I can recall now from memory, you
25 know -- as an example, when we asked things like

1 what was the noise level that -- so, you know, it
2 would have been just a broad noise level as an
3 attribute. The language for that is kind of what
4 morphed into what you're seeing out here. So, for
5 example, you know, the noise level was more related
6 to vibrations as an advanced vibration a noise
7 control on the washing machine, which is not -- that
8 seemed to be something -- again, I'm just giving you
9 an example here, but those are the kinds of things
10 that help me craft this final version, along with
11 inputs from other sources.

12 Q Who attended the focus groups?

13 A Could you clarify what you meant by
14 "who attended"?

15 Q How were participants selected to
16 participate in your focus groups?

17 A There's again, you know, these are
18 recruited. These are not meant to be a random
19 sample. Right. It's a focus group, it's
20 exploratory. But they do meet the criteria listed
21 in the screening questionnaire, which would be that,
22 yes, we would capture some of the demographic
23 information. They had to be 18 years or older.
24 We'd have to make sure that they own a clothes
25 washing machine, or an owner of a clothes washing

1 machine, and that they met some of the other
2 criteria.

3 Q But how did you find these people?
4 Does your company have a pool of people to go to,
5 did you use another third-party company to help you
6 locate these people?

7 A So, something like this, there are
8 different approaches that we might use. For
9 example, in this case, the facility provider also
10 does some of the recruiting because they may have a
11 pool. In other instances, if the facility recruiter
12 happens to be part of a mall they would intercept
13 people at the mall and bring them in who are willing
14 to participate in the focus groups. So there are
15 different approaches that would be used to recruit
16 them.

17 Q And do you know how the recruiting
18 occurred here?

19 A I don't recall that, but I think it
20 would be one of these two approaches that would have
21 been used.

22 Q And where was the focus group?

23 A Again, you know, that really doesn't
24 impact the -- the inputs that were received to go
25 into these surveys, I don't remember the exact

1 facility or the location. It might have been -- it
2 probably was likely in New Jersey somewhere, but I
3 don't remember the exact details.

4 Q On page 8 of this exhibit 5, it's
5 actually the first page that says sample 8. It's
6 number 8 on the bottom. It says the -- there will
7 be a telephone-based recruiting and invitation to
8 California or New Jersey.

9 I believe in your report you actually
10 said the focus group was in Pennsylvania. Why is
11 there a discrepancy between the different states?

12 A I do believe that the -- they may have
13 had the facility in Pennsylvania, but they would
14 have recruited people out of New Jersey. So this is
15 sort of the initial note that went out to the
16 moderators who might have given them to the facility
17 owners. So the facility would have been in
18 Pennsylvania but people recruited would have been
19 New Jersey.

20 Q What about California? There was no
21 focus group in California, was there?

22 A No, there was not. It says California
23 or New Jersey, just part of the planning process of
24 saying okay, do we want to have one on the East
25 Coast and one on the West Coast, or both. Again, as

1 I said, it's purely exploratory to try to get a lot
2 of input, so it really doesn't change whether we did
3 both of them in Pennsylvania or we did one of these
4 on the East Coast, West Coast. It doesn't change.
5 We took all different inputs in order to come up
6 with a list of attributes.

7 Q And if you see SQ 8 in that sample
8 plan, it says you need at least five Maytag owners.

9 Why did you require five Maytag owners?

10 A Well, it's, you know, the number itself
11 doesn't matter. We wanted to make sure that the
12 voices of some of the Maytag owners, in terms of
13 what they considered was included, but the exact
14 number, again, this is very exploratory; we wanted
15 to get their inputs. And part of the process is to
16 make sure that we had included some of those
17 people's inputs as well.

18 Q And it did not matter to you whether
19 the participants of the focus group had purchased
20 front-loading washing machines or top-loading
21 washing machines, did it?

22 A Well, the participants, in general,
23 would have purchased a whole range of them. This
24 being again very inconclusive. You're not trying to
25 reach price premium on the basis of 16 surveys,

1 right --

2 Q I understand that, I'm just asking --

3 A -- so it doesn't matter. And as part
4 of my methodology, it doesn't really matter what
5 they own. What matters more is what they describe
6 as the things they considered when making a
7 purchase.

8 Q But you did not restrict it to just
9 people who had bought top-loading washing machines;
10 is that correct?

11 A You know, clearly we didn't restrict
12 it. Right.

13 Q Thank you.

14 A As I said, it doesn't matter because
15 I'm really trying to explore a whole broad range of
16 attributes.

17 Q If you turn to page 14 of this exhibit.
18 Okay. Tell us a little bit about your washing
19 machine, brand, model. Why were you asking about
20 the model, if again it does not matter to you if it
21 was a top-loading versus a front-loading?

22 MR. MARCHESE: Objection to form.

23 THE WITNESS: Well, if you are doing a
24 focus group, you want to get people put in the
25 mindset of what purchases they made. Some

1 people remember the brand, some people
2 remember the model. You want to get them
3 talking about it. So we wanted them to start
4 talking about the purchase. And then you kind
5 of prime them so that they're next able to
6 talk about what all did they consider and what
7 attributes did they consider. So it's really
8 meant to be a question to get them talking and
9 get them discussing things.

10 BY MS. McLAUGHLIN:

11 Q Do you know how many of the focus group
12 participants owned a top-loading washing machine?

13 A That information is immaterial. I
14 don't know the answer to that.

15 Q What was the purpose of asking them
16 about falling advertisements for washing machines?

17 A Again, very much the same reason, I
18 want to get them comfortable. People like to talk
19 about advertisements. People like to talk about the
20 promotions. People like to talk about the deals
21 they got. So we wanted to make sure we got them
22 comfortable. And it's a very standard practice, and
23 a lot of focus groups get them comfortable, get them
24 talking, so that we can then hear specifically, you
25 know, what is it drove their decision, what are the

1 things that they considered.

2 Q Let's turn to page 15, Section F,
3 factors important in choosing a washing machine,
4 brand, model.

5 Which features did the focus group
6 participants say were the most important?

7 A So if you look at your question right
8 now is suggesting that a focus group should tell you
9 which features are important, i.e., more important
10 or less important. And a focus group is not
11 designed to do that. A focus group is really
12 designed to help understand what all people
13 considered. So if someone found a certain set of
14 things more important they're going to talk more
15 about it. And so it's really not meant to come to a
16 conclusive, evidence that attribute X is two times
17 more important than attribute Y, as said by 16
18 participants. It's not the right thing to do.

19 Q Well, as you recall from your
20 debriefing -- or do you recall from your debriefing
21 which are the attributes that were discussed as more
22 important to them or that they focused on more in
23 their discussions? If you don't recall, you can
24 say, I don't recall.

25 A So I don't recall, and I think, you

1 know, it doesn't change my approach or methodology.
2 It doesn't change the results. It clearly is a
3 demonstration that we were comprehensive in what we
4 took into account in designing the attributes that
5 drove people's purchases.

6 Q Please turn to page 16, the ENERGY STAR
7 qualification.

8 What was the purpose of having this
9 many probes on ENERGY STAR?

10 A Well, we wanted to make sure that if
11 someone said ENERGY STAR qualification, we wanted to
12 have them talk about it to see if there's anything
13 else specifically that meant beyond ENERGY STAR. So
14 as an example, high-efficiency is something that,
15 you know, was not -- if I can recall a little bit,
16 you know, high energy efficiency was talked by a few
17 people, and I wanted to make sure that if it came
18 out, if we had these probes going in, is some of
19 that going to come out in that instance.

20 Again, it doesn't change what I did in
21 the quantitative survey, and as you can see, there's
22 a comprehensive list of attributes, and the
23 methodology is very sound. This is just a reason to
24 say, you know, did people tell you anything more on
25 ENERGY STAR.

1 Q And do you know if these questions
2 were, in fact, discussed at the focus group, the
3 questions listed in the probe for ENERGY STAR
4 qualifications?

5 A I was not present myself. If the
6 discussions on ENERGY STAR had come up and they were
7 adequate then maybe those probes were not necessary.
8 If they needed to look at and see how the expert
9 moderator needed to have more inputs then she may
10 have probed some more out of them.

11 Q What I'm not understanding is, you say
12 your focus group, the purpose of it was to
13 understand all the different attributes, and
14 obviously you knew ENERGY STAR was going to be an
15 attribute, that's the whole purpose of this survey.
16 Why was there such a focus on ENERGY STAR at your
17 focus group, if you were mostly interested in
18 learning about all the different attributes?

19 MR. MARCHESE: Objection to form.

20 THE WITNESS: So, if you think about,
21 you know, what we talked about earlier in one
22 of your questions, about looking at a list of
23 attributes that are more important than the
24 claim attribute here, the ENERGY STAR logo,
25 and a few that are less important, because

1 what don't want to do is, you don't want to
2 stack up all attributes that are likely to pop
3 up. You know, again, this is very
4 qualitative. This is not a conclusive
5 evidence. So you do want to make sure that
6 you have a wide range of attributes that you
7 want to consider. So in talking -- in these
8 probes, the whole idea was, are there other
9 things. People say I really didn't think
10 about ENERGY STAR, but there were other things
11 that mattered to me, and these are the ones,
12 you know, less important or other things that
13 people say that are more important, but it's
14 not a question of how much more important it
15 is.

16 BY MS. McLAUGHLIN:

17 Q I understand that. My question was,
18 you list half a dozen, maybe more, probes for the
19 ENERGY STAR attribute, but none for any of the other
20 attributes, and so I'm just wondering why such a
21 focus was at the focus group on ENERGY STAR as
22 opposed to what else should be included in your
23 survey.

24 MR. MARCHESE: Objection. That
25 question misstates the document.

1 THE WITNESS: So, you know, clearly, as
2 I mentioned, it's a focal attribute. And when
3 we're trying to estimate -- my assignment here
4 is to estimate the price premium associated
5 with that. So in probing that, the whole idea
6 here is, are there things. And if you look at
7 a lot of the other attributes are less about
8 something like an ENERGY STAR, they're very
9 specific and easily understood by people. So
10 you want to see if there are things that pop
11 up. And again, it's highly likely that the
12 moderator never even made those probes because
13 people came up and said, you know, ENERGY STAR
14 logo was something they considered in their
15 purchase decision and there were other things
16 that they considered and they felt some were
17 more important, some were less important. And
18 realistically, we wanted a range of things to
19 include.

20 BY MS. McLAUGHLIN:

21 Q Do all people understand what ENERGY
22 STAR means?

23 A Well, as I recall from -- you know,
24 again, it's been a while, so from what my moderator
25 suggested was that people understood that. They

1 understood the ENERGY STAR logo, and I'm not
2 necessarily -- they see the logo. They see it's
3 critical, and I think it's validated now by looking
4 at the conjoint survey that consumers do understand
5 what it is and how important it is as compared to
6 some of the other attributes.

7 Q Does everyone have the same
8 understanding of what the ENERGY STAR logo means?

9 A That doesn't matter.

10 MR. MARCHESE: Objection.

11 BY MS. McLAUGHLIN:

12 Q That's not my question. My question
13 wasn't does it matter if everyone understood: Does
14 everyone have the same understanding of the ENERGY
15 STAR logo and what it means?

16 MR. MARCHESE: Objection, outside the
17 scope.

18 THE WITNESS: I'm going to answer it
19 like I said before. It really doesn't matter
20 because if they did not understand it and it
21 was not an important driver of their purchase
22 decisions, then the conjoint survey would have
23 validated by either suggesting that the price
24 premium is very small, or when we look at the
25 attribute importance itself would that have

1 been at the bottom of the 19 attributes rather
2 than where it is.

3 BY MS. McLAUGHLIN:

4 Q So you're saying -- I think you still
5 haven't answered whether all people have the same
6 understanding of what the ENERGY STAR logo means.

7 MR. MARCHESE: Objection to form,
8 outside the scope.

9 THE WITNESS: People understand the
10 presence or absence of the ENERGY STAR logo.
11 They may or may not need to understand all the
12 technical details. For them the ENERGY STAR
13 logo suggests a certain set of benefits, and
14 that is clearly validated in the conjoint
15 survey by looking at the price premium. Now,
16 if it was not beneficial to them, if it was
17 not an important driver, they would not have
18 considered that attribute. That would be at
19 the bottom of the pile.

20 BY MS. McLAUGHLIN:

21 Q And do people have different
22 understanding of what those certain set of benefits
23 are associated with the ENERGY STAR logo?

24 MR. MARCHESE: Objection, lacks
25 foundation.

1 THE WITNESS: For the purposes of our
2 survey here, you know, we are not testing them
3 on the electricity versus water savings, et
4 cetera. You know, they are clearly seeing the
5 logo on some machines. And in this case, in
6 the conjoint survey, it's all about if that is
7 an important attribute, they're looking at the
8 presence of the ENERGY STAR logo versus the
9 absence of the ENERGY STAR logo.

10 BY MS. McLAUGHLIN:

11 Q So turning back to page 16 at the
12 bottom, number 5. It says, Can you please indicate
13 your top 5 from the below list?

14 If you asked -- discussed with
15 participants to find out their top five, why
16 couldn't you use the focus group to make a list of
17 maybe the top ten that came up, or the ones that
18 were repeated so often? Why again do you have to go
19 back to the 19 attributes if people can rank what
20 their top five is?

21 A Well, if you look at Consumer Reports,
22 if you look at how retailers describe their
23 products, as well as you take the inputs from the
24 conjoint survey, you want to create a list that is
25 comprehensive so that we have some attributes that

1 are more important than the ENERGY STAR logo,
2 whether it's present or absent, and some attributes
3 that are less important. So the asking of that
4 question was to determine where in that whole list
5 do the other attributes fall so that we have a
6 comprehensive list that we want to consider.

7 Again, you go to Consumer Reports, you
8 go to the retail shops itself, a lot of the
9 attributes that have been included, a majority of
10 them that I included are actually descriptions that
11 are given on products. I don't see that -- as I
12 said, if I went through a shorter list of
13 attributes, in fact, it's highly likely that the
14 ENERGY STAR logo would be upward biased in terms of
15 the price premium that we would calculate.

16 Q Turn back to, I believe it's Exhibit 4,
17 the list of attributes.

18 Did you include every possible level
19 for every attribute?

20 A Again, my expert opinion, and having
21 looked at all the Consumer Reports and product
22 descriptions I included a comprehensive list. I
23 don't necessarily need to include every single list,
24 every single level, but I would say that clearly the
25 list that is here is very comprehensive.

1 Q But you can't say that it includes
2 every level? That's all I'm asking, does it include
3 every level that is possible for every attribute?

4 A As far as the conjoint survey
5 methodology is concerned, I don't need to do that.

6 Q But did you do that? It's a very
7 simple yes or no. I just want answers. Very
8 simple.

9 A I'd tell you yes because I was very
10 comprehensive. I took a very, you know, rigorous
11 approach in putting together this list. And I do
12 strongly believe that you see here a fairly
13 comprehensive list of attributes and the levels
14 describing them.

15 Q So if you look at attribute number 3,
16 which is ENERGY STAR, which is two levels, no ENERGY
17 STAR logo, ENERGY STAR logo. In your survey, did
18 you explain what the ENERGY STAR is, or what the
19 logo is?

20 MR. MARCHESE: Objection, compound.

21 THE WITNESS: So there's a very high
22 awareness of the ENERGY STAR logo, and I think
23 this is something that I've seen in, you know,
24 different materials where clearly there's a
25 very high awareness of this; and in the focus

1 group as well. It was an attribute that was
2 considered quite extensively. So for me
3 giving an additional definition, a technical
4 definition, is not necessary because what it
5 really amounts to is, is it present or not
6 present.

7 If someone did not know what the ENERGY
8 STAR logo is, that means that they would not
9 have considered that in their purchase
10 decision and that attribute would not have as
11 much value for them as compared to others. So
12 when I look at the aggregate value that I'm
13 looking at computing, and the price premium
14 I'm computing that whole range of, you know,
15 value for different people will help me get to
16 what I'm really looking at in terms of the
17 price premium.

18 BY MS. McLAUGHLIN:

19 Q I'm going to move to strike that as
20 nonresponsive. All I asked was a simple question,
21 did you include a definition or explanation. Is the
22 answer no?

23 MR. MARCHESE: Objection to form.

24 THE WITNESS: The answer is I did not
25 need to include it.

1 BY MS. McLAUGHLIN:

2 Q I didn't ask if you needed to. I just
3 asked if you did. It's a simple yes-or-no question.

4 A Well, I did not include it. I do not
5 believe that it is necessary.

6 Q That's all I needed. Very simple.
7 If you turn to page 9 of your report,
8 in the Section B under Survey Design. In that first
9 paragraph, second sentence, The ability to reduce
10 the consumption of electricity and water to clean
11 clothes is an important defining factor.

12 Did your survey attempt to determine
13 the price premium associated with the relatively
14 more energy-efficient washer?

15 MR. MARCHESE: Objection to form.

16 THE WITNESS: My survey, it was used to
17 determine whether -- what the price premium
18 was that you would allocate, if any, to the
19 ENERGY STAR logo, which, you know, in turn,
20 has these efficiently measures of electricity
21 and water. So in that sense, yes, it did take
22 into account the understanding of the price
23 premium and the value associated with the
24 ENERGY STAR logo.

25 BY MS. McLAUGHLIN:

1 Q But you did not directly test a more
2 energy-efficient washer versus a less
3 energy-efficient washer and the premium people place
4 on that?

5 A The ENERGY STAR logo is a reflection of
6 -- the presence of the ENERGY STAR logo is a
7 reflection of a washer -- a clothes washing machine
8 that is more energy efficient, and so the comparison
9 of the presence of the logo versus the absence of
10 the logo gets the answer to the question you're
11 asking.

12 Q But you did not test how efficient a
13 machine is, it was just, yes, they have the logo or
14 doesn't have the logo, not actually looking at the
15 efficiency of a washing machine and the different
16 levels of efficiency; is that correct?

17 MR. MARCHESE: Object to form.

18 THE WITNESS: Consumers don't
19 understand the exact technical details of the
20 amount of energy efficiency. So to test the
21 logo is adequate, and it takes into account
22 the holistic issue associated with the energy
23 efficiency.

24 (Energy guide logo was marked RS-6 for
25 identification.

1 BY MS. McLAUGHLIN:

2 Q The court reporter is handing you what
3 has been marked as Exhibit RS-6.

4 Have you seen this before?

5 A I haven't seen exactly this particular
6 label, but I have seen these labels on, you know,
7 washing machines that describe this, yeah.

8 Q Well, I'll represent to you that this
9 is an energy guide label from one of the washing
10 machines at issue in this case.

11 Are you aware that Federal law requires
12 that this energy guide label be affixed to every
13 washer before its sold?

14 A I'm not an expert on what the Federal
15 Government requires, so I really do not know, and
16 for me to comment on it would not be correct.

17 Q Do you understand that these are
18 affixed to washing machines generally at the point
19 of sale?

20 A Yes, I understand that's the case;
21 yeah.

22 Q So if you look at the energy guide
23 label, it shows on the estimated yearly operating
24 costs that this washer has an estimated operating
25 cost of \$22.

1 Could you have done an attribute of
2 estimated yearly operating costs with one level
3 being 22, another being 30, another being 70? Could
4 that have been an option for you; yes or no?

5 MR. MARCHESE: Objection to form.

6 THE WITNESS: The answer is no because,
7 again, going back to the extensive inputs that
8 I considered, whether it's the Consumer
9 Reports or, you know, the retail flyers that
10 people look at and consider before they walk
11 into the store, or the focus groups, consumers
12 don't necessarily -- do not talk or
13 necessarily understand specifically what it
14 means to have an energy estimated yearly
15 operating cost. However, the logo itself was
16 something that they recognize and consider in
17 making those purchase decisions.

18 BY MS. McLAUGHLIN:

19 Q But you could have put this as an
20 attribute, whether or not consumers had told you
21 about in the focus groups, you could have made an
22 attribute of estimated yearly operating costs with
23 various levels. That's something you can do in
24 creating a survey.

25 MR. MARCHESE: Objection to form.

1 THE WITNESS: Well, the fact that the
2 attribute is not something that you see on
3 promotional flyers or whether you see it in
4 the focus group being mentioned is a good
5 enough. I mean, we had 19 attributes, and I'm
6 not testing the price premium on the \$22, I'm
7 testing -- my assignment is about looking at
8 the price premium on the ENERGY STAR logo, so
9 there's clearly a perception created when
10 people look at this information. There's so
11 much other additional noise here that really
12 the ENERGY STAR logo is what we are looking at
13 and what they're considering in their purchase
14 decision, and for me to look at the price
15 premium of the ENERGY STAR logo is what is
16 more critical.

17 BY MS. McLAUGHLIN:

18 Q Well, do you understand that in this
19 case, the Plaintiffs here are alleging that the
20 machines did not deliver on the estimated operating
21 costs that was promised?

22 A Well --

23 MR. MARCHESE: Objection. Allegations
24 in the Complaint speak for themselves.

25 THE WITNESS: Yeah, so for me, I mean,

1 the Complaints describe that. I'm not an
2 expert on the Complaint or the Federal
3 regulations or testing practices.

4 BY MS. McLAUGHLIN:

5 Q I understand that, but that's an
6 allegation in the claim. You could have tested
7 people's desire for a washing machine -- value of a
8 washing machine that promises to only cost \$22 per
9 year versus one that promises to cost \$30 per year,
10 you could have tested that proposition?

11 MR. MARCHESE: Objection, asked and
12 answered. Objection to form.

13 THE WITNESS: See, in my expert
14 opinion, and I think I can look at other
15 pallet examples. You know, in an automobile
16 you see in very small fine print how much
17 gasoline is needed to expend for the whole
18 year. That, if you look at in focus groups
19 that I've done, you will never see that come
20 up as an important attribute. You also don't
21 even see that in advertisements, in news
22 flyers or any such thing. It's the same
23 example out here. It's not a purchase driver
24 and it is not necessary for me to include this
25 as an attribute.

1 BY MS. McLAUGHLIN:

2 Q All right. I'm going to move to strike
3 that as non-responsive. Let's move on.

4 MR. MARCHESE: How is that
5 nonresponsive?

6 MS. McLAUGHLIN: I asked a very simple
7 question, could you have included this as an
8 attribute and he gave a long diatribe about
9 car ratings and the importance of this to
10 buying and focus groups. It did not respond
11 if that could have been created as an
12 attribute with levels.

13 MR. MARCHESE: He said that he could
14 have done it, but just because you could do it
15 doesn't mean you should do it.

16 MS. McLAUGHLIN: But I don't think he
17 said that you could do it.

18 MR. MARCHESE: Most consumers don't
19 understand all the noise surrounding it.

20 MS. McLAUGHLIN: I didn't ask "should
21 you include it," I asked "could you." It's a
22 very different question.

23 MR. MARCHESE: Right.

24 MS. McLAUGHLIN: And I just wanted a
25 simple answer, I could, but I did not.

1 MR. MARCHESE: Well, let's move on to
2 the next question.

3 MS. McLAUGHLIN: That's what I was
4 hoping to do.

5 (Exhibit 6 (Survey Screenshots), 31 -
6 96, was marked RS-7 for identification.)

7 THE WITNESS: There are two copies.

8 BY MS. McLAUGHLIN:

9 Q Yeah, I think that was meant for one of
10 the other attorneys here.

11 Dr. Sukumar, the document just handed
12 to you is labeled as RS-7. What is this?

13 A We used a survey program, and this is
14 just a screen shot of how the survey shows up.

15 Q Now, this is not a copy of the survey
16 that was received and filled out by every single
17 participant, is it? This is an example of what
18 someone could have seen?

19 A This is just an example of what someone
20 could have seen.

21 Q Who filled out the answers in this
22 question -- in this survey?

23 A Well, I have staff who I ask to help me
24 with taking the screen shots and they would have
25 just assigned some numbers because, again, this, as

1 I said, it's a screen shot. It's an example.

2 Q So this is not a sample survey by one
3 of the 530 participants in your survey, is it? Or
4 it's something by one of your staff members?

5 A Again, the whole purpose here is to
6 give you an example of a screen shot.

7 Q Could we have received a screen shot
8 for each of the 530 participants? Is that something
9 that you can get?

10 A So you have the data on questions
11 outside the ASEMAP given to you in a flat file, in
12 an easily readable Excel file. That would be
13 exactly what the questions that they had punched
14 into the survey. And then for the ASEMAP portion of
15 it, we've actually given you what the data is that
16 the ASEMAP collects for each one of these different
17 steps that are followed by the respondent.

18 Q Again, I just want to know, is it
19 possible to see a screen shot of what every
20 participant received? It may be and that's fine. I
21 just want to know is that a possibility.

22 A So, yes, that's a technical thing that
23 I may have to check. Never having been asked that
24 before, I would have to check and let you know.

25 Q Turn to page 48 at the bottom of this

1 exhibit. It's the page entitled, Instruction
2 Screen. Now, I'm going to ask you to kind of do a
3 little flipping with your report. I just want to --
4 you list some steps in your report and I want to
5 make sure I have each step corresponded to where in
6 your survey it happened. So if you would turn to --
7 back to page 12 of your report.

8 Does step number one, under the ASEMAP
9 section on page 12 of your report, correspond to
10 what is happening on page 48 of the screen shots
11 exhibit?

12 A That's correct.

13 Q And if you can look over pages 50 to 68
14 of the screen shots exhibit. And this is the
15 section titled at the top of each one, Attribute
16 Being Rated.

17 Do these pages correspond with step
18 number two on pages 12 to 13 of your report?

19 A That's correct.

20 Q Now, in step 2 you say that -- in that
21 second sentence, The desirability ratings for all
22 levels of each feature are linearly rescaled, if
23 necessary, so that the least preferred level of each
24 feature has a desirability rating of zero and the
25 most preferred level has a rating of 10.

1 What do you mean by that?

2 A So again, what the ASEMAP software
3 does, it allows you to put a desirability score for
4 each of these levels of that particular attribute.

5 And if you suggest that -- like on page
6 68, a standard one-year warranty is least desirable,
7 that he's a four, a two-year limited warranty on
8 specific parts is also four, and then the most
9 desirable is 10 -- is the 10-year limited warranty
10 on specific parts. So we would rescale that to go
11 from zero to 10 and understand what is the threshold
12 that people are looking at. This step is really
13 meant to understand the thresholds in terms of how
14 things change. And then later on there's a section
15 which allows us to understand how important the
16 attributes are so that we can look at both of them
17 together in order to come up with the estimated
18 value of the part.

19 Q So if we're taking the ENERGY STAR
20 question and someone says they have a three for not
21 having a logo and a five for having a logo, would it
22 then be rescaled so that not having a logo is a zero
23 and having the logo is a 10? Is that how it works?

24 A I just need to check one thing. These
25 are some of the technical details in the paper.

1 Q I apologize.

2 A And I'm sorry, I -- you know, this
3 particular step, the rescaling happens not directly,
4 so it's not as simple as what you're describing.
5 And the exact technicality of it would be hard for
6 me to explain today.

7 Q Turn to -- back to the screen shots
8 exhibit. If you turn to page 70. It says,
9 Section 2, categorization and linking, at the top.
10 Does this page correspond to number 3
11 on page 13 of your report?

12 A That's correct.

13 Q Now, I'm guessing at this point every
14 participant receives a different -- the page looks
15 different for each participant? Or did they receive
16 something that looks exactly like what is shown on
17 page 70?

18 A No, it would be different for every
19 participant. It's randomized, and then depending on
20 how they answer the first half of what they're
21 picking, the next screen that they see for their
22 rank ordering, those would be different.

23 Q So I understand that this is -- you're
24 giving them changes. So from one thing to another
25 thing, how do you determine what those two items

1 are? Is it what they put as their least desirable
2 to their most desirable on the last section?

3 A That's correct.

4 Q And what happens if they gave
5 everything the same -- they gave a 5 down the
6 middle, how would you -- how would they see it in
7 here? So say someone -- ENERGY STAR logo, they're
8 completely and different in both ways so they gave
9 both a 5, what would they see in this case?

10 A It won't let them move to the next
11 stage because you really want to see a difference
12 there.

13 Q So you require participants to specify
14 a different number, desirability?

15 A Correct. Correct.

16 Q Turn to page 72 of your screen shots.
17 And this is a section where you ask participants to
18 rank the changes of each attribute. Is that
19 correct?

20 A That's correct.

21 Q And does this section correspond to
22 step number 4 of your report, on page 13?

23 A That's correct.

24 Q Now, would it be -- they don't rank all
25 19 attributes at once; is that right?

1 A That's correct. So the previous step
2 they have identified which ones are in the first
3 bucket, which ones are in the second bucket, and
4 then each bucket is ranked in that fashion. So
5 again, you know, the purpose of it is to make sure
6 we get the most amount of information from them to
7 estimate the value.

8 Q So you get their top 10 and then the
9 next screen, which is page 73, you do their bottom
10 9?

11 A That's correct, and that leads to a lot
12 of engagement on their part as well as they go
13 through the exercise.

14 Q Turn to page 78 of the screen shots
15 exhibit. Does this step correspond to number 5 on
16 page 13 of your report?

17 A That's correct.

18 Q So now how does -- and maybe this is
19 too technical, so you can give me a very simplified
20 version of it. How does the ASEMAP software
21 determine what questions are asked to each
22 participant?

23 A So a very simple answer would be to say
24 it's in the Journal of Marketing Research paper in
25 the statistical details, and a second simple answer

1 would be to say is that as the first set of pairs
2 are shown, depending on which attributes are
3 considered to be more important, and by how much
4 more. There's a statistical procedure that is
5 running in the background that is estimating how
6 important one attribute is as compared to the
7 others. So the more important attributes we end up
8 measuring a lot more so that we can get a lot more
9 accuracy on that and the lesser important attributes
10 we would end up having lesser amount of measurement.
11 So that's sort of the very general English version
12 of the expression.

13 Q And I appreciate that. So if I
14 understand it correctly, I get one comparison
15 question, and the way I answer it may dictate how my
16 next comparison question is going to look; is that
17 right?

18 A That, in a very general set of terms,
19 yes. But the exact statistical procedures are a lot
20 more complicated. Again, they're described in the
21 paper.

22 Q And which paper is that?

23 A This is the Ofek, Netzer and Srinivasan
24 Journal of Marketing Research that was published in
25 the American Marketing Association.

1 Q Thank you. And in step 5 of your
2 report on page 13 you mention that previous research
3 has shown that 13 paired comparisons are sufficient.
4 Does that mean that each respondent gets just 13
5 questions or does some get more, some get less?

6 A We cap it at 13 because what we've seen
7 is that if you go to 15 -- typically we need odd
8 numbers of pairs to be shown, again, based on the
9 math and the statistics around it. If you go to 15
10 you start to lose accuracy, meaning fatigue starts
11 to set in, just like --

12 Q Today.

13 A -- with exposure of that and the
14 accuracy of the attribute value goes down.

15 Q Now, in this section of the screen
16 shots, so let's take page 78, you're asking people
17 to allocate 100 points between the changes of --
18 between two different changes; is that right?

19 A We are asking them to allocate 100
20 points, but in two attributes with the changes
21 described in them. Right. So the ENERGY STAR
22 attribute, whether it's no ENERGY STAR logo versus
23 ENERGY STAR logo, and then the second attribute is
24 color of finish of the clothes washing machine
25 between metallic gray, which was the least

1 preferred, and white, which was the more preferred,
2 so really the tradeoff is between the attributes,
3 but the comparisons of the levels are given to them
4 as well.

5 Q Why is it given to them in terms of
6 changes? Why not just say ENERGY STAR logo and
7 white color and have them rate which is more
8 important? Why are you presenting in terms of
9 changes?

10 A Again, you know, it's described in the
11 paper the changes help them understand more
12 effectively how to trade off one attribute versus
13 another attribute, because what we really want to do
14 here at this stage is do a very good job of
15 measuring the accuracy of how important one
16 attribute is versus another, and showing them the
17 context of what they found as being more desirable
18 versus least desirable is helpful in that
19 comparison.

20 Q And people don't find it -- when I read
21 it, this confuse me because I have to think, do I
22 prefer no ENERGY STAR logo to more ENERGY STAR logo.
23 There's so many different dimensions that it seems
24 confusing. You've not found that this is a
25 confusing method? Because it certainly struck me as

1 not being intuitive --

2 MR. MARCHESE: Objection.

3 BY MS. McLAUGHLIN:

4 Q -- as opposed to just having ENERGY
5 STAR logo and being able to say which do I prefer?

6 MR. MARCHESE: Objection to form.

7 THE WITNESS: So, you know, I told you
8 we started using the software in 2004.
9 Forgive my diatribe, but I want to make a case
10 for why we -- our consumers and survey takers
11 essentially said, no, it's not confusing, it
12 really helps me understand which one was
13 important and by how much more. So ever since
14 the software was designed in 2004 a lot of
15 feedback has been gotten in how consumers
16 react to the interface to what they're looking
17 at, and you will see, and some of the results
18 are published in the Journal of Marketing
19 Research paper, where responders and survey
20 takers and consumers have essentially said
21 it's very engaging for them, it's very clear
22 as to what it is, and they feel that they're
23 making the right kind of tradeoffs very much
24 like they would do in the real world. So
25 sorry for that long answer, but I wanted to

1 make sure.

2 MR. MARCHESE: We've been going for
3 about an hour. Can we just take another quick
4 break?

5 MS. McLAUGHLIN: Can we do it as quick,
6 because they've been running rather long and I
7 would love to cut out sooner than later.

8 MR. MARCHESE: All right. Then we'll
9 keep it to five minutes.

10 MS. McLAUGHLIN: All right. That would
11 be great. Thank you.

12 VIDEO OPERATOR: We're going off the
13 record at 4:39 p.m. This is the end of disc 6
14 in the deposition of Dr. Sukumar.

15 (Brief recess.)

16 VIDEO OPERATOR: Going back on the
17 record, 4:45 p.m. This is the beginning of
18 disc 7 in the deposition of Dr. Sukumar.

19 BY MS. McLAUGHLIN:

20 Q Dr. Sukumar, did all of participants
21 receive questions on comparing the relative
22 importance of the ENERGY STAR logo to another
23 attribute?

24 A Well, they would get exposed to the
25 ENERGY STAR logo, and then depending on if it was

1 something that was lower in importance for them,
2 then the way the methodology works is they may or
3 may not get exposed to it multiple times.

4 Q Would everyone receive at least one of
5 these slighter comparison questions, including the
6 ENERGY STAR logo?

7 A It depends on, you know -- again, this
8 gets into a lot of the technical details, and it
9 depends on how they answer the questions. They --
10 everyone may not get one of those sliding bars.

11 Q So some people may not receive any
12 questions for the ENERGY STAR in this comparison
13 section?

14 A That's right. It's partly because they
15 already ranked it as being at the bottom, and
16 measurements at the bottom may be less important to
17 take as compared to the top, and if you look at the
18 details of the statistics around how that
19 calculation is done for those at the bottom -- it's
20 in the paper and the technical details can be
21 discussed.

22 Q If it's the case that a participant did
23 not receive any ENERGY STAR comparison questions,
24 how would you compute a part worth for the ENERGY
25 STAR value for that person?

1 A So all participants saw the ENERGY STAR
2 logo in the first step where they were exposed to
3 the attributes and the levels. They also saw it in
4 the next step, which is where they were asked to
5 indicate the desirability of those levels. In the
6 sliding bar case, if that attribute was less in
7 importance and they also saw it in the third step
8 and they were doing the sorting exercise,
9 categorization and sorting exercise, they also saw
10 it in the fourth step, which would be the ranking
11 exercise, in the pair-wise importance comparison --
12 when they do the sliding bar or the pair-wise
13 comparisons, if the attribute was in the lower level
14 or the lower degree of importance, as indicated by
15 the previous steps, then they are less likely to see
16 any measurements there because, as the technical
17 details of the paper suggests, that attributes that
18 are at the tail end of that importance do not need
19 to be measured very accurately, and we measure it
20 using the -- the interpolation of the importance
21 between -- of an attribute above it as compared to
22 the attribute below it.

23 Q So if a person does not get a
24 comparison question on the ENERGY STAR logo, you
25 would still compute a part worth for that person?

1 A That's correct. And also because
2 they've gotten the desirability scores which tell
3 us, you know, how desirable one level is as compared
4 to the other, and the attribute importance, how
5 important is the attribute itself, is something that
6 is measured as being less important and being at the
7 tail end of it. So it's almost important for the
8 ENERGY STAR logo as close to a zero, and relatively
9 speaking as compared to things above it, so the
10 part-worth utility would be computed -- would still
11 be computed, but it would be a very, very small
12 number because the importance of that -- of the
13 ENERGY STAR logo attribute is very small. It's way
14 at the bottom.

15 Q And would some participants get two,
16 three, four questions about the ENERGY STAR logo in
17 the comparison section?

18 A It's likely. I don't know the exact
19 nature. It depends on, -- again, this is an
20 adaptive algorithm that is very accurately measuring
21 how important the attribute is. If the attribute is
22 of greater importance they will get more
23 measurements. If the attribute is of lesser
24 importance there would be a lesser need to measure
25 those.

1 Q If you could turn to page 90 of the
2 screen shots exhibit. And this is Section 4,
3 Likelihood to purchase clothes washing machine.

4 Does this section correspond with step
5 number 6 on pages 13 to 14 of your report?

6 A That's correct.

7 Q And as I understand your report, this
8 section does not -- the answers to this section do
9 not go into your price premium calculation; is that
10 right?

11 A So, just to correct, the answers to
12 this section do not go into the estimation of the
13 actual value for the conjoint -- for the attribute,
14 the presence or absence of the attribute. However,
15 and this is that section where we also calculate the
16 adjusted R spread so we know what people said in the
17 value section of it as compared to how they would
18 react when they see a particular profile. We do
19 estimate what is said, you know, what is reported
20 out here, the logo odds ratio, and a logistic
21 regression is run, so we do get a coefficient, a b0
22 and b1 coefficient. And the b1 coefficient is
23 critical to include in the price premium -- in
24 formula 14 of the price premium calculations.

25 Q If you could turn back to -- actually,

1 let's do it this way.

2 (Respondent ID document was marked RS-8
3 for identification.)

4 BY MS. McLAUGHLIN:

5 Q The court reporter has just handed you
6 what has been marked as Exhibit 8. Do you know what
7 this is?

8 A So this is the -- this comes from the
9 ASEMAP software. We've taken screen shots.
10 Obviously the data that is being captured is
11 captured and the calculations are built into the
12 ASEMAP software, and this is literally for every
13 respondent, if you look at respondent ID, and it
14 gives an ID to match to the flat file that gives you
15 the part-worth utilities and, you know, then
16 subsequent to that the calculations in the computer.
17 So this is that raw file, raw data, that comes out
18 of ASEMAP and screen shots being captured of that.

19 Q I'll represent to you that that
20 document we received was about 4,000 pages long and
21 so this Exhibit 8 is just, I think, a 36-page
22 sample. It is not representative of the entire
23 universe because I did not want to lug that to this
24 office today.

25 So if we look -- take example of this

1 first person here. It's respondent 2635. Looking
2 at the desirability matrix on this page 1, this
3 person would have indicated a 3 for no ENERGY STAR
4 logo and an 8 for an ENERGY STAR logo.

5 Am I reading that properly?

6 A Yes, that's correct.

7 Q So if we proceed to page 3, the bottom
8 of that chart, it says Importances. What do each of
9 the columns in this box mean, besides attributes?

10 A So the Journal of Marketing Research
11 paper talks about the detailed statistics. There's
12 a logistic regression when they do the sliding bar
13 step, and based on that, the importance of every
14 attribute is being computed out here. So the first
15 column is for this respondent, how important is one
16 attribute as compared to the other. So this is a
17 percentage in importance that you're getting,
18 relative importance.

19 The second column is giving you how
20 they ordered this particular attribute when they
21 were doing the rank ordering exercise. The next
22 column there where it says order in parenthesis,
23 attribute, this is telling you, if I recall
24 correctly, again, you know, if my memory serves me
25 right, this says after the part-worth utilities are

1 computed and the importances are created through
2 using the sliding bar scales, all the mathematics
3 and statistics are computed, what is the rank order
4 of this particular attribute, and correspondingly
5 then, the rank order correlation is on the next page
6 at the bottom, the .909. This last column, the R
7 max minus R min, I can't tell you exactly what that
8 is. I just don't have my technical cheat sheet, if
9 you want to call it that, and I can't remember all
10 the details from the top of my head.

11 Q So do I read it correctly, if we look
12 at the ENERGY STAR attribute, this person ranked
13 ENERGY STAR ninth out of the 19 attributes.

14 Am I reading that correctly?

15 A Correct, they are ranked it ninth in
16 the rank ordering exercise. However when they
17 looked at all the other attributes, the importance
18 of this moved to number 13.

19 Q So if you look in the next page, page
20 4, pair comparisons, and page 5, this person did not
21 receive any questions on ENERGY STAR.

22 And that would be because their
23 importance was lower?

24 A When they did the trade off, the
25 sliding bar scales, there were other attributes that

1 they pointed to as being a lot more important. And
2 so more measurement was taken among the more
3 important attributes and they did not get the ENERGY
4 STAR attribute because it went to the bottom of
5 their pile.

6 Q So that's why they didn't get any
7 questions -- comparison questions?

8 A Because it moved down to the bottom.
9 It's 13 out of 19.

10 Q So if you look back at page 4, when you
11 look at the comparison questions, is this what's
12 showing you what the two attributes they were asked
13 to compare, so one was the change in the brand and
14 one was change in the vibrations, noise level?

15 Is that the right way to read this?

16 A That's correct.

17 Q And the values in the first example, it
18 was a 90 for brand, so when they slid it all the way
19 over to the 90 marker and the vibrations went down
20 to 10.

21 Am I reading that right?

22 A That's correct.

23 Q You can put that exhibit aside.

24 Turn to page 13 of your report, step 5.

25 Let me know when you're done reviewing that

1 paragraph.

2 A Yes.

3 Q So the sentence that I'm wanting to
4 focus on, it says, The importance multiplied by the
5 desirability scores (obtained from step 2) provides
6 the values for the different levels of each feature.

7 What does "desirability" mean?

8 A So in academic literature, desirability
9 is a scale that is used in the self-explicated part
10 of a conjoint survey like this. And the different
11 levels are shown and a rating is done from zero to
12 10 to understand how desirable one level is as
13 compared to another level.

14 Q So what are units of desirability?

15 A The unit of desirability is a rating
16 scale, so zero is -- is not at all desirable and 10
17 is that particular level is extremely desirable. So
18 you have a scale from zero to 10 and there are
19 levels in between that anyone can pick to express
20 what their desirability is of a particular level of
21 an attribute.

22 Q And you mentioned this is coming from
23 the academic literature. What literature are you
24 referring to?

25 A So what Professor Srinivasan has built

1 in here, there are prior conjoint pieces using
2 self-explicated conjoint where the desirability
3 scales are commonly used. And it's those literature
4 that I'm talking, I'm not pointing to a very
5 specific one, but this previous work that has been
6 published in the conjoint literature as well as in
7 understanding consumer behavior what -- how do you
8 take into account what is important to consumers and
9 their behaviors, there are different models that
10 talk about the desirability scale and how to
11 describe it.

12 Q So you're basing it on a body of work
13 by Dr. Srinivasan, is that right, as opposed to a
14 specific article that you're pinpointing?

15 A Well, there's a body of work done by
16 Professor Srinivasan, as well as several other
17 experts in this whole idea of self-explicated -- and
18 I'm referring to that again based on my, you know,
19 training, experience, Ph.D., et cetera, but as of,
20 you know, right now, in a specific peer-reviewed
21 paper is not what I'm referring to.

22 Q Is what, I'm sorry?

23 A I'm not referring to a specific
24 peer-reviewed paper, like you pointed out. There's
25 a whole body of published peer-reviewed papers,

1 including some written by Professor Srinivasan that
2 are published and peer reviewed.

3 Q And what does "importance" mean in that
4 sentence I read to you?

5 A So the importance is, the relative
6 importance of one attribute as compared to another
7 attribute. Now, if you remember the sliding bar
8 scale we used, indicating when we look at two
9 attributes at a time how important one attribute is
10 as compared to another and by how much more. So
11 you're looking at sort of the strength of the
12 importance of one attribute as compared to another,
13 and then there's a statistical analysis that is
14 being done at the same time that looks at, again,
15 described in the paper by Netzer and Srinivasan that
16 looks at how important is that first attribute is
17 compared to the others, taking into account the last
18 attribute as well. So the relative importance is
19 being estimated to that logistic regression.

20 Q So if the relative importance is based
21 on the sliding scale, how do you figure out an
22 importance when someone doesn't have any sliding
23 scale questions about ENERGY STAR logo?

24 A Again, without getting into all the
25 technical details, there's quite a bit of statistics

1 involved. There is -- it's described in the Ofek,
2 Netzer and Srinivasan paper. It talks about how
3 attributes that are of lower importance, because you
4 do measure the lowest important attribute and you
5 may have also measured it for a few other attributes
6 above it, and for those that you haven't measured
7 into between, how the interpolation scale works, the
8 details of that are given in the paper; and, you
9 know, we can go through it, if you wish.

10 Q And what are units of importance?

11 A So a little while ago, when we talked
12 about Exhibit 8, which was the raw data from the
13 ASEMAP, we talked about page 3 where the importances
14 are given. Right. And relative importance for
15 capacity of the clothes washing machine was 7.39,
16 for loading type was 12.88. So if you take 100
17 points as saying how important is one attribute as
18 compared to another attribute. So of the 100
19 points, the second attribute, loading type was
20 12.8 percent, whereas the capacity of the clothes
21 washing machine was 7.39 percent. So the scale for
22 the importance is a percentage. It's a relative
23 importance between one attribute as compared to
24 another attribute. It's a very standard in
25 multi-attribute preference measurement or conjoint

1 analysis as a whole big school of literature.

2 Q So would you agree that neither
3 importance, nor desirability, are measured in the
4 units of utility?

5 MR. MARCHESE: Objection to form.

6 THE WITNESS: So when we talk about
7 utility, and part-worth utility when you put
8 the importance and desirability together,
9 again there's a whole school of literature
10 that takes this whole idea of self-explicating
11 models and shows in the measurement of
12 multi-attribute preferences how that computes
13 to being the part-worth utility of a
14 particular level of a particular attribute.

15 So, for example, the big Excel
16 spreadsheet that was given as part of my
17 attachments will give you numbers for ENERGY
18 STAR logo which says no ENERGY STAR logo a
19 positive number for one, a negative number for
20 another. And the two of them would sum up to
21 zero because, again, that's a utility, one
22 compared to another. So these two go into the
23 calculation of the part-worth utility.

24 BY MS. McLAUGHLIN:

25 Q So you disagree with the statement that

1 importance is not measured in a unit of utility?

2 A I just think that the question is not
3 clear enough from what you're saying because
4 importance and desirability go into the calculation
5 of the utility of the part-worth utility.

6 Q And would you disagree that
7 desirability is not measured in units of utility?

8 A I'm going to give an answer that may
9 sound repetitive, but I just wanted to say that
10 there's an extant body of literature that talks
11 about part-worth utilities and how that is
12 calculated in preference models, like the conjoint
13 model that we've used here, and how desirability and
14 importance helped make up that part-worth utility
15 that we're talking about. So what I would say is,
16 the answer is that this is what part-worth utility
17 is all about. This is how the utility is calculated
18 and utility is, you know, it's a scale that -- if
19 you want, it's not in dollars. It's not in
20 kilograms. It's not in miles. It is a relative
21 scale called as a utility scale.

22 Q And you mentioned the extant body of
23 literature. What articles are you specifically
24 referring to? What peer-reviewed materials are you
25 specifically referring to?

1 A So there are papers published by
2 Professor Srinivasan and Paul Green, from the
3 University of Pennsylvania, that talk about a wide
4 variety of conjoint techniques and how the utilities
5 are calculated in each one of them. There is, going
6 back in time and history, a researcher called
7 Fishbein, who wrote papers about this topic, and
8 subsequently there are several other authors and
9 academics who have written about this and published
10 them after, you know, being peer reviewed. You
11 know, this particular general article is a good
12 example for the kind of accolades it got and the
13 amount of time it takes to publish something of
14 this. It's heavily peer reviewed by other academics
15 who are knowledgeable about this file.

16 Q I'm sorry, which article are you
17 referring to?

18 A The Netzer and Srinivasan paper that
19 was published in the Journal of Marketing Research,
20 which is a flagship journal for anybody in the
21 academic circles.

22 Q So if you will turn to page 14 of your
23 report under Determining the Price Premiums. The
24 second sentence of that first paragraph, it says,
25 The analysis is done at the individual respondent

1 level and only aggregated at the very end.

2 What do you mean by "at the very end"?

3 A So first we compute the part-worth
4 utilities based on the data that you just saw. So
5 it's done for respondent number -- whatever the
6 respondent number is for each individual. Now, when
7 you compute the price premium, and use formula 14
8 from the paper by Ofek and Srinivasan that was again
9 published in a leading journal called Marketing
10 Sciences, the way it is done is you need to
11 aggregate the utility difference. That's what is
12 described here. So if you look at the part-worth
13 utility for ENERGY STAR versus no ENERGY STAR. That
14 difference is aggregated across all the respondents,
15 just as you look at aggregating the value of a
16 dollar, a value of a -- of price as an attribute
17 across all the respondents. And then you use
18 formula 14. So again, you know, formula 14 gets
19 into a lot of specifics. But that aggregation is
20 done.

21 Q So if I understand the way you do this,
22 you calculate the aggregated value of the ENERGY
23 STAR logo and then you also calculate the aggregated
24 value of a dollar for the price range 300 to \$500
25 and then you divide the logo by the dollar. Is that

1 right?

2 A That's a very simple description, so I
3 don't want to --

4 Q I'm sure.

5 A So I don't want to have that taken out
6 of context. If you go back to formula 14 and the
7 whole paper, I think you'll see the details that are
8 described as to how that is done.

9 (Paper written by Ofek and Srinivasan,
10 How Much Does the Market Value an Improvement
11 in a Product Attribute, was marked RS-9 for
12 identification.)

13 BY MS. McLAUGHLIN:

14 Q The court reporter has just handed you
15 Exhibit 9 to your deposition. Is this exhibit the
16 Ofek and Srinivasan article you keep referring to?

17 A Yes, that's correct.

18 Q This is called, How Much Does the
19 Market Value an Improvement in a Product Attribute
20 published in Marketing Science?

21 A That's correct.

22 Q Now, the price premium measure you use
23 in that is coming from this Ofek and Srinivasan
24 article, it's measuring ratios of averages of
25 part-worth; is that correct?

1 A That's correct. You can see that on
2 page 403 of this particular exhibit. And it says
3 formula 14.

4 Q So it's the average part-worth divided
5 by an average part-worth?

6 A That's correct.

7 Q And in the report you refer to this as
8 being -- computing the a1 divided by a2 ratio; with
9 a check by formula 14.

10 Is there a difference between the two?

11 A Could you repeat that question again
12 for me?

13 MS. McLAUGHLIN: Could you read back
14 what I read -- spoke.

15 (At which time the following question
16 was read back by the reporter:

17 "Question: And in the report you refer
18 to this as being -- computing the a1 divided
19 by a2 ratio; with a check by formula 14.

20 Is there a difference between the
21 two?")

22 THE WITNESS: Can you -- I'm still not
23 sure.

24 BY MS. McLAUGHLIN:

25 Q Sure.

1 A Sorry about that.

2 Q No. No. It's okay. It could be just
3 me not understanding, which is very possible.

4 I believe it's in the beginning -- so
5 you agree that you -- your computation was the a_1
6 divided by a_2 ratio, correct?

7 A That's correct.

8 Q And would you say that ratio is exactly
9 the same as formula 14 or a shorthand of it?

10 A I would say it's a -- I wouldn't say
11 it's a shorthand of it, but you -- you know, there
12 are different terms in there that I used. So, for
13 example, there is a term there called Theta that
14 needs to be included, and a Theta version -- the
15 value of Theta is based on question CQ, I think, 01,
16 from the survey that is incorporated in there. So
17 it's the application of that particular formula that
18 is being done correctly and being done across many
19 different trial cases as well; and is done
20 correctly.

21 Q So on page 7 of your report you say, In
22 addition, I calculated the price premium using
23 formula 14.

24 So you did it two different ways you
25 did the a_1 divided by a_2 ratio, and the formula 14?

1 A So the a1 divided by a2 is just to give
2 a description for the steps taken, but formula 14 is
3 being applied here, and formula 14, as you can see,
4 has a numerator and a denominator, which is similar
5 to the a1 and the a2.

6 Q And in your report you say that this is
7 the most commonly used method and market research.

8 Are you referring to following the
9 formula 14?

10 MR. MARCHESE: Objection to form.

11 THE WITNESS: I'm referring to taking
12 the average across the utilities of computing
13 that a1 and then dividing it by a2 and formula
14 14, as you can see when it was published, is
15 used very extensively. There's a very clear
16 argument for why to use formula 14 and how it
17 takes into account a lot of other factors that
18 need to be included.

19 BY MS. McLAUGHLIN:

20 Q And so I guess I'm kind of -- and the
21 sentence that I'm reading is on page 15 in that
22 first full paragraph. It says, Based on my
23 experience in the market research industry, the
24 method most commonly used to determine price premium
25 is to use the average value (utility function) and

1 compute the price premium as the average value for
2 the feature divided by the average value per dollar.

3 How do you know that it's the most
4 commonly used in the field? I understand it's most
5 commonly used probably in your firm, but in the
6 larger field, what is that based on?

7 A Well, it's based on, you know,
8 discussions with other peers who use this, as well
9 as my experiences and expertise. And you can
10 clearly see formula 14 is a reflection of taking a
11 ratio of those two averages to compute that.

12 Q So did Ofek and Srinivasan compute a
13 market price or an equilibrium price?

14 MR. MARCHESE: Objection to form,
15 compound.

16 THE WITNESS: Can you -- what do you
17 mean by that, do they compute -- I'm not sure
18 I quite understand that question.

19 BY MS. McLAUGHLIN:

20 Q Is Ofek and Srinivasan's computation
21 essentially a market price, based on your
22 understanding of that word?

23 A It computes the price premium for, you
24 know, the -- when you look at -- they say attribute
25 improvement. In this case, the attribute

1 improvement is between the absence of the logo, the
2 ENERGY STAR logo, and the presence of the ENERGY
3 STAR logo. You could take another attribute, you
4 know, they may have three levels, and you're looking
5 at an improvement from one level to another level
6 and you would be doing the same computation.

7 Q So if you look at the first page of the
8 Ofek and Srinivasan article, in that paragraph
9 between the two lines at the top, in the second
10 sentence, In this paper we arrive at a measure of
11 market value, such that the comparison of the
12 measure against the incremental unit cost of the
13 attribute improvement is key in deciding whether or
14 not the attribute improvement is profitable.

15 What do they mean by "market value"?

16 A So market -- for them value is the
17 price premium that we are talking about, and it is
18 -- the -- that sentence is a description of the
19 process that they go about in order to demonstrate
20 the formula 14 and how that comes about. So, you
21 know, we talked earlier about, is this a science or
22 not a science. So they are actually going through
23 the process of deriving that formula, taking into
24 account all of these other factors that are
25 described out here, and then reaching to the

1 conclusion for how conjoint analysis can be used in
2 calculating the price premium for whether an
3 attribute is present or absent.

4 Q So by referring to market value, are
5 they essentially meaning a difference in market
6 prices?

7 A No, they are really referring to it as
8 a price premium because that's what they're looking
9 at in terms of -- we just talked a little while ago
10 about the numerator and the denominator. So the
11 numerator is the utility for the estimated value for
12 that attribute and the denominator is the estimated
13 value for a dollar, and the average ratios taken
14 give you an estimate for the price premium.

15 Q Do Ofek and Srinivasan compute a
16 willingness to pay measure?

17 A Well --

18 MR. MARCHESE: Objection to form.

19 THE WITNESS: Ofek and Srinivasan
20 compute a measure of price premium because
21 they take into account competition. They take
22 into account, you know, unit costs and so on
23 in terms of deriving that formula. And, in
24 fact, if you look at the whole process that
25 they go through it's a calculation of the

1 price premium.

2 BY MS. McLAUGHLIN:

3 Q So they consider competition between
4 firms in their formula?

5 A In deriving the formula they go through
6 that whole process.

7 Q So they do consider competition between
8 firms?

9 A It's again, you know, if you read and
10 look at what they mean, they say they look at
11 incremental costs of the attribute improvement,
12 competition from other brands, the potential for
13 market expansion, and heterogeneity in customer
14 preference structures are explicitly modeled using
15 the multinomial framework, which is exactly what we
16 do as well.

17 Q If you turn to page 401 of the
18 Ofek/Srinivasan article. And I'm looking at under
19 formula 9. It says, MVAI is also the incremental
20 price the firm will charge per unit improvement in
21 the product attribute, assumed to be infinitesimal,
22 if it were to hold market share or sales constant.

23 Isn't this a definition of willingness
24 to pay?

25 A Well --

1 MR. MARCHESE: Hold on a minute. I
2 just want to take a minute and see if I want
3 to lodge an objection, but I have to read this
4 first.

5 Objection to form.

6 BY MS. McLAUGHLIN:

7 Q You can answer.

8 A This is a definition of price premium,
9 particularly when you take into account, you know,
10 unit cost and competitor effects and so on. If you
11 chose not to include any of those other factors,
12 then what you're representing is the maximum price
13 that someone would be willing to pay just for a
14 product improvement. So the formula, as it is used,
15 formula 14, and the entire work that we have done,
16 we have taken into account retail sales data, we
17 have taken into account different brands in our
18 ASEMAP conjoint survey; is one that reflects price
19 premium and not willingness to pay.

20 Q So just to make sure I have it
21 straight, this is -- MVAI is not -- he's not giving
22 us a definition of willingness to pay in the
23 sentence I just read?

24 A Correct.

25 MR. MARCHESE: Objection, asked and

1 answered.

2 THE WITNESS: If you look at how this
3 whole formula has been derived and all the
4 other factors that are taken into
5 consideration, that's not -- you're doing
6 price premium here and you're looking, you
7 know, backward into what the price is already
8 being charged for the product with all the
9 retail sales data and you're saying how much
10 of that am I apportioning to this particular
11 attribute.

12 BY MS. McLAUGHLIN:

13 Q So does this mean that MVAI is not a
14 market price?

15 MR. MARCHESE: Objection to form.

16 THE WITNESS: I'm a little confused
17 with the question now because when you say
18 market price, and MVAI is or is not a market
19 price, I'm not sure I fully understand that.

20 BY MS. McLAUGHLIN:

21 Q According to your understanding of
22 market price, is MVAI different from a market price?

23 A Well, MVAI is taking retail price -- so
24 let's be more precise. Right. Market price is a
25 much -- if I assume something about market price, I

1 will not -- it may be different than what you are
2 assuming. So if you look at the retail price and
3 the retail sales data price that we looked at, it's
4 saying what's the portion of that price that,
5 looking backward you would attribute to an
6 attribute. In our case, we took the attribute of
7 the ENERGY STAR logo. Right. How much of that
8 price would you attribute to that particular
9 attribute going from not being present to being
10 present in a particular product.

11 Q So suppose we take two respondents from
12 your survey and call them respondent A and
13 respondent B. Respondent A has a part worth of two
14 for the ENERGY STAR logo and respondent B has a part
15 worth of four for the ENERGY STAR logo. Does this
16 mean that respondent B values the ENERGY STAR logo
17 more than respondent A?

18 A I would need to look at the entire data
19 because each of these part-worth utilities, when you
20 give a number like four and two it -- is that the
21 difference between the presence versus the absence?
22 How exactly was it computed and what's the relative
23 importance? I would need to take all that into
24 account in order to answer your question.

25 Q So would you agree that you can't

1 compare part worths across respondents?

2 MR. MARCHESE: Objection to form.

3 THE WITNESS: Well, to be able to
4 compare part worths across respondents is why
5 that last step we used to compute the b1
6 coefficient, again as described in the report,
7 that the b1 coefficient -- so when you
8 multiply the b1 coefficient with the utility
9 and then you average it, you're able to
10 average it because the b1 coefficient is a
11 reflection of standardizing the scales and
12 allowing you to have comparisons across
13 respondents of what the utility scale is.

14 BY MS. McLAUGHLIN:

15 Q Would you agree that utility scales are
16 individual specific and can't be compared?

17 A This is a whole extant literature
18 written by Paul Green from University of
19 Pennsylvania. Again, I don't remember the exact
20 reference that looks at -- that goes through the
21 process of being able to translate the utilities
22 scale in a manner that you can compare it across
23 different respondents and you can aggregate it
24 across respondents, and the b1 multiplier is exactly
25 that process that we're talking about.

1 Q So are you saying -- are you
2 disagreeing that my statement that utility scales
3 are individual specific and can't be compared or are
4 you saying that you can compare utility scales?

5 MR. MARCHESE: Objection to form.

6 THE WITNESS: I'm saying that utility
7 scales can be aggregated as long as you can
8 bring it to a common scale and in the form of
9 multiplying it with a b1 coefficient, like
10 what's done in the work that I've done.

11 BY MS. McLAUGHLIN:

12 Q So how do scientists or statisticians
13 assess the reliability of statistical estimates such
14 as part worth?

15 A Can you explain to me what you do mean
16 by statistical reliability?

17 Q Well, I want to know: How do
18 statisticians assess the reliability of statistical
19 estimates such as a part-worth?

20 A Again, I don't know exactly what you
21 mean by "reliability" so I'm going to tell you some
22 examples.

23 Q Well, what is your definition of
24 reliability?

25 A I wouldn't use the term "reliability."

1 I would use, for example, predictive accuracy,
2 looking backwards, right, or I would use a term,
3 confidence interval estimates, which we have given
4 for the price premium in the paper. So the
5 confidence interval estimate is looking at the price
6 premium and saying, what's the range that it is
7 likely to be, what's the upper value, what is the
8 lower value? And that is done -- you know, it's
9 taking into account, the question we talked about
10 earlier this morning, about random sampling, and
11 when you have a random sample what happens if you
12 were to find a different random sample, would the
13 results vary, and the statistical confidence
14 interval tells you the bandwidth within which it
15 will vary. So if you look at my report -- I think
16 it's in Exhibit -- it's probably not here.

17 Q Okay. Then I think that's what I was
18 about to introduce.

19 A Yeah, it's one of the exhibits that
20 talks about what the confidence interval estimate is
21 around the price premium. That gives you a measure
22 of random sampling error or statistical -- one of
23 the measures of statistical reliability. Another
24 measure of statistical reliability could simply be
25 that you're comparing different methods like

1 contingent valuation method and you're saying, well,
2 how do they compare? So we had a 44.3 percent, and
3 very close to that is what Dr. Dennis came up with
4 what estimate of what the percentage would be of the
5 price. That's again his estimation of reliability;
6 two different methods, two different approaches,
7 giving you very similar answers.

8 Q Is the price premium estimate also a
9 statistical estimate?

10 A The price premium estimate is based on
11 data that came from the conjoint survey. So in that
12 sense it is first and foremost looking at, you know,
13 it's a creating a summary statistic. Right. It's
14 multiplying it by the coefficient and averaging the
15 value, the part-worth value. But the part-worth
16 itself came from the conjoint survey. So the
17 statistical confidence interval of two ratios need
18 to be computed in order to get the confidence
19 interval estimate of the price premium. So the
20 answer is yes, the price premium is a statistical
21 value that comes from data that use the random
22 sample of respondents to that participate in the
23 survey.

24 (Exhibit 5 (Price Premium Table) 29 -
25 30 was marked RS-10 for identification.)

1 BY MS. McLAUGHLIN:

2 Q So the court reporter has just handed
3 you Exhibit 10. What is this?

4 A This is an exhibit from my report that
5 gives the confidence interval estimates for the
6 price premium, the \$180.39 and it gives you a
7 95 percent confidence interval of lower bound and a
8 95 percent confidence interval upper bound for the
9 price premium. So what it's saying is that if you
10 took a different sample, let's say we were to go out
11 and do another study, if you look at the random
12 sample from there, the price premium that you would
13 get from that calculation -- from that new sample,
14 new random sample, would be somewhere in the range
15 for \$136 to \$224.

16 Q And on -- what is the difference
17 between unadjusted price premium and a biased
18 adjusted price premium?

19 A So in the biased adjusted price
20 premium, we are essentially taking into account
21 rates to be applied to balance the sample. Remember
22 we talked about earlier on to make the sample
23 completely representative of the U.S. census we did
24 calculate some rates. So applying those rates -- so
25 the biased adjusted is applying the rates, which is

1 \$180.39. If you don't apply that, the unadjusted is
2 180.87. So it's a little more, and we've taken the
3 right number, which is the conservative estimate of
4 \$180.39.

5 Q And you say that the standard error is
6 \$22.64. Can you define standard error?

7 A So a standard error is a reflection of
8 the standard deviation that you can get on the price
9 premium. So the amount of -- I'm going to give a
10 simple term without getting into the details of the
11 statistics, so the -- the variability -- it is the
12 variance of the variability around the price
13 premium. And then the way you compute the lower
14 bound and the upper bound is, you're setting a
15 certain probability number, a certain degree of
16 confidence. I want to be 95 percent confident.
17 Then you take the standard error and you multiply it
18 by a factor in order to get the lower bound range.
19 So you subtract that from the \$180 to get the lower
20 bound range and then you take the standard error and
21 multiply it by that probability distribution score,
22 the Z score, to get the upper bound.

23 Q And in your report you say you
24 calculate the standard error using the formula from
25 Mood, Graybill and Boes?

1 A Boes.

2 Q Introduction to the Theory of
3 Statistics; is that right?

4 A That's correct.

5 Q Is the formula used in the Mood book
6 for a ratio of sample averages?

7 MR. MARCHESE: Can I just hear that
8 back, please?

9 (At which time the following question
10 was read back by the reporter:

11 "Question: Is the formula used in the
12 Mood book for a ratio of sample averages?")

13 THE WITNESS: That's correct.

14 BY MS. McLAUGHLIN:

15 Q Isn't your price premium a ratio of
16 averages of estimates?

17 MR. MARCHESE: Objection to form.

18 THE WITNESS: Again, you know, we
19 discussed this. The part-worth utilities are
20 forming the numerator and the denominator.
21 Both of these come from a random sampling
22 framework. You know, you randomly sample
23 respondents who participated in the survey.
24 And so there is, for each one of them, if you
25 only looked at the parts-worth utilities, each

1 one of them has the sampling error that you
2 had to take into account. But when you take
3 the ratio of two summary statistics, in this
4 case two averages, that is also a random term
5 that then using the formula in Mood, Graybill
6 and Boes, we're able to compute what is the
7 probability distribution that the two ratios
8 of random variables is going to get, and then
9 that formula is being used to compute the
10 confidence intervals.

11 BY MS. McLAUGHLIN:

12 Q And so your price premium, would you
13 agree that it's a ratio of averages of part-worths?

14 A I think we already established that,
15 right?

16 Q Okay. Would you agree that your price
17 premium is not data?

18 MR. MARCHESE: Objection to form.

19 THE WITNESS: No, I don't agree with
20 that.

21 BY MS. McLAUGHLIN:

22 Q Is the Mood, Graybill and Boes formula
23 for the ratio of averages of other estimates?

24 A The Mood, Graybill and Boes formula,
25 and, again, I don't have the book here to go through

1 the exact specifications of the formula, is really
2 the ratio of two random variables. And in this
3 case, the part-worth utility for an attribute is a
4 random variable. It comes from measurements that
5 are done on survey data, and the denominator is also
6 a random variable. So the Mood, Graybill and Boes
7 formula is meant to be used for the ratio of two
8 random variables, which this is the particular case
9 of that. So price premium is a random variable. In
10 order to get to the exact distribution of the ratio
11 of two random variables we need to use the formula
12 that is described in Mood, Graybill and Boes.

13 Q Would you agree that your price premium
14 is not a ratio sample data?

15 A I would not agree with that.

16 MR. MARCHESE: Objection to form.

17 MS. McLAUGHLIN: Do you want to take a
18 break and see how much I have left and we can
19 finish up.

20 MR. MARCHESE: If you want to take a
21 break, that's fine.

22 MS. McLAUGHLIN: Let's do it.

23 VIDEO OPERATOR: Off the record,

24 5:41 p.m.

25 (Brief recess.)

1 VIDEO OPERATOR: Back on the record

2 6:01 p.m.

3 BY MS. McLAUGHLIN:

4 Q Dr. Sukumar, are you a statistician?

5 A My Ph.D. had a minor in statistics and
6 a major in business administration. I've taken many
7 courses in statistics, and obviously all the work we
8 do in market research involves data, involves
9 statistics. So, you know, extensive minor work in
10 this area.

11 Q Do you have a Ph.D. in statistics?

12 A My primary major is in marketing. My
13 minor in my Ph.D. is statistics. My dissertation
14 and thesis involved huge amounts of statistical
15 models that had been developed.

16 Q Was your Ph.D. from the department of
17 business or the department of statistics?

18 A So my Ph.D. is from the college of
19 business administration, department of marketing,
20 but obviously, as you can see in this particular
21 piece of work, there's a lot of statistics involved.
22 So my minor is -- involves professors from the
23 department of statistics.

24 Q Have you published in any statistics
25 journal, such as the Journal of American Statistical

1 Association?

2 A Obviously I haven't published in the
3 Journal or Statistical -- JASA, Journal of the
4 American Statistical Association, I have not done
5 that. But I am a member of the American Statistical
6 Association. I do read a lot of the journals that
7 are published and I'm very closely involved with,
8 you know, literatures in econometrics, in
9 statistics, as well as my own field of market
10 research and marketing.

11 Q Have you taught any Ph.D. or
12 master's-level courses in statistics?

13 A I've taught master's-level courses in
14 statistics. I've taught Ph.D.-level courses that
15 would be labeled as marketing models, but that
16 involve a lot of statistical papers. And again,
17 I've been out of academia for the last seven years
18 running Optimal Strategix Group, but when I was
19 teaching I taught both MBA and Ph.D.-level courses.
20 MBA level and master's level definitely in
21 statistics, and then Ph.D. level, the use and
22 application of statistics in various marketing
23 models like the conjoint analysis that we do.

24 Q So you taught statistics courses out of
25 the department of statistics at the Ph.D. or

1 master's level?

2 A So I was always a professor in the
3 business school, in the business administration
4 school. And at that level, I've been teaching
5 master's students in the business school. Ph.D.
6 students that took my class, they're primarily Ph.D.
7 students who are doing quantitative methods in
8 market. If I recall now, when I taught at
9 University of Houston, which has a very large Ph.D.
10 program, I would get students from applied
11 statistics in the statistics department attending my
12 class because they saw a lot of applications for
13 things like the conjoint methodology, Bayesian
14 techniques and so on to various marketing problems,
15 the applications of statistics to these problems and
16 they would take courses with me as well.

17 Q So did you ever -- but you always
18 taught out of the business school; is that correct?

19 A As a professor, my primary affiliation
20 was with the business school.

21 Q So yes?

22 A Yes.

23 Q Have you ever been -- have you been
24 elected as a Fellow of any professional society of
25 statisticians?

1 A Again, to be, you know, an expert in my
2 field, I don't necessarily have to be a Fellow. As
3 I said, so the answer is no. But more importantly,
4 if you look at the tremendous amount of work that I
5 have done in the last eight years, as well as before
6 that, statistics has always been something that I've
7 used as part of all my work.

8 Q I understand that. I just want a
9 simple question -- an answer to a simple question is
10 whether you have been elected as a Fellow of any
11 professional society of statisticians. Yes or no?

12 A You know, again, I answered it in my
13 last part. I said no, I haven't been elected as a
14 Fellow.

15 Q That's all I need.
16 Have you ever been recognized for your
17 achievement in statistics?

18 A Well, you know, I haven't been -- the
19 answer is no, but it doesn't matter because my
20 company again has done a lot of great work in
21 statistics, using statistics, and, in fact, we've
22 received awards by societies like the American
23 Marketing Association. We received a Spectrum Award
24 for the use of ASEMAP and the statistical work that
25 we did using, you know, the utilities and conjoint

1 work we obtained. My company also received an award
2 from the European pharmaceutical market research
3 association for the work we did. Again, using
4 conjoint as a methodology to help understand the
5 various different aspects that we were studying at
6 that time.

7 Q So various times throughout the
8 deposition today and in your report you say you have
9 a Ph.D. in marketing and statistics. You do not
10 actually have a Ph.D. in statistics, do you? You
11 have a minor in statistics? Yes or no?

12 A Well, a Ph.D. has a major and a minor.
13 So my major is marketing because I'm applying
14 statistical techniques to the major. The same token
15 if you go to people in the statistics department who
16 get their Ph.D.s there, their Ph.D.s might be in
17 statistics, but they might also have a minor in
18 psychology where statistics is applied, or in
19 marketing or finance where statistics is very
20 heavily used. So, you know, it's -- in my case, my
21 major is marketing. My minor is statistics. So I
22 had professors from the statistics department who
23 are part of my dissertation committee.

24 Q And is your position that you were
25 trained as a statistician?

1 A I am trained as a statistician, having
2 taken master's-level courses in statistics, as well
3 as some Ph.D.-level courses in statistics in the
4 department of statistics. I have used statistics
5 extensively in a lot of my work. I've taught
6 statistics and data models -- data modeling
7 techniques to students at the master's level, to
8 students at the Ph.D. level. So, again, those are
9 Ph.D. students primarily in the business school,
10 though some of the Ph.D. students from the
11 statistics department often come across, again,
12 interdisciplinary interaction that happens very
13 common in all universities, and they encourage that
14 because of the applicability of statistics to a lot
15 of the marketing problems that we are trying to
16 address.

17 Q Are you trained in survey sampling?

18 A As part of my Ph.D. in marketing I am
19 trained in survey sampling and courses that are
20 relevant to that.

21 Q What doctorate-level courses or texts
22 have you studied regarding statistical methods for
23 sampling?

24 A Again, this is many years ago now, so
25 I'm going to give it to you from memory. I've taken

1 Ph.D.-level courses that pertain to conducting, you
2 know, that pertain to surveys in sampling that I
3 use. So part of our Ph.D. courses -- again, this is
4 30 years ago when I finished my Ph.D.,
5 approximately, where those courses are a requirement
6 that teach you specifically, again, I don't remember
7 the exact name of the course, but courses that will
8 teach you about the appropriateness of sampling,
9 courses that teach you about the appropriateness of
10 using experimental designs in conducting surveys
11 like what we are talking about. So quite a bit of
12 courses had been taken in that area.

13 Q Are you an economist?

14 A I think we talked about this this
15 morning. I do not have a degree in economics or a
16 Ph.D. in economics. However, I've taken courses in
17 microeconomics and macroeconomics, econometric for
18 the Ph.D. levels. You know, there's typically three
19 courses, econometrics 1, 2 and 3, that are offered
20 in the economic department. I've taken game theory
21 from the very person who received a Nobel Prize. He
22 was on the faculty of the University of Pittsburgh,
23 Alvin Roth. I've taken courses in economics, but I
24 wouldn't go around labeling myself as an economist.

25 Q Have you published in any of the major

1 economics journals?

2 A You know, again, the same answer. You
3 know, which is -- but just going -- but looking at
4 my publications in Journal of Applied Econometrics.
5 That's a journal that economists publish in. If you
6 look at my publication in Management Sciences,
7 that's a publication that you'll see many economists
8 publish in as well. And so from the point of view
9 of have I published in economics journals --
10 journals like Journal of Applied Econometrics and
11 Management Sciences and Marketing Science, these
12 tend to be interdisciplinary. You see statisticians
13 publish in them, you see people who carry a Ph.D. in
14 economics publish them. My primary Ph.D. was in
15 marketing and I published in these same journals.

16 Q So have you published in the American
17 Economic Review?

18 A The answer is no. And it doesn't
19 matter.

20 Q I just want yes or no. It's very easy.
21 Have you published in the Journal of Political
22 Economy?

23 A Again, the answer is no, and it's not
24 relevant to what -- you know, what we are doing
25 here?

1 (Exhibit 1 (Dr. Sukumar CV) was marked
2 RS-11 for identification.)

3 BY MS. McLAUGHLIN:

4 Q The court reporter has just handed you
5 what has been marked as Exhibit 11. What is this?

6 A This is a copy of my CV.

7 Q Is this up to date?

8 A So I think some of my expert witness
9 work needs to be updated, for example. I was
10 disclosed in the class action case against Scotts EZ
11 Seed and I haven't listed it out here. There was
12 another case in January I was disclosed and I was
13 deposed. This was a case between Mirror Worlds
14 versus -- in my opinion, Mirror Worlds versus Google
15 and I was deposed in that. I was an expert for
16 Mirror Worlds and I was deposed in January. So
17 prior to the submission, you know, I wasn't as yet
18 declared as an expert.

19 Q So have you given deposition testimony
20 in both of those two cases that you mentioned?

21 A Yes, I have.

22 Q And for EZ Seed, which side did you
23 represent?

24 A I represented the class.

25 Q So the Plaintiffs in that case?

1 A Correct.

2 Q And in the Google case, who do you
3 represent -- were you an expert for?

4 A I represented the Plaintiffs.

5 Q Is it your expert opinion in this case
6 that class members each incurred damages of \$180?

7 MR. MARCHESE: Objection to form.

8 THE WITNESS: So it is my opinion that
9 the class, in the aggregate, would -- the
10 price premium, as we see it from the conjoint
11 survey that was done for the class, in the
12 aggregate, is \$180.39 that I reflected in my
13 report, which is 44.3 percent of the \$407 that
14 the class action -- that the class members
15 buying the models that we looked at would have
16 paid.

17 BY MS. McLAUGHLIN:

18 Q So is it your opinion that each class
19 member should receive \$180 for -- as a result of
20 this lawsuit?

21 MR. MARCHESE: Objection, that calls
22 for a legal conclusion.

23 THE WITNESS: My assignment here was to
24 look at if there was a price premium, which
25 yes, there is a price premium for the ENERGY

1 STAR logo as compared to not having the ENERGY
2 STAR logo, for the -- the class, as an
3 aggregate, on the models that we talked about
4 earlier today. In terms of the actual damages
5 and so on, I'm not a damages expert. I'm not
6 a legal expert in those areas. My work is
7 conjoint surveys and that's the work that I've
8 done.

9 BY MS. McLAUGHLIN:

10 Q Is it your expert opinion that class
11 members who purchased one of the Maytag Centennial
12 washers at issue paid \$180 too much?

13 MR. MARCHESE: Objection, calls for a
14 legal conclusion, outside the scope.

15 THE WITNESS: You know, I just want to
16 take it back to what my assignment was.
17 Right. So my assignment was not to do what
18 you're talking about. My assignment was to
19 see what the price premium is, in the
20 aggregate, for the class among people who
21 bought the Maytag models, and I used conjoint
22 surveys and I came out with my opinion in my
23 expert report, which is that \$180.39 or 44.3
24 percent of the \$407 is what that price premium
25 is for those Maytag models.

1 BY MS. McLAUGHLIN:

2 Q So is that your way of saying that you
3 do not have an expert opinion as to whether class
4 members paid \$180 too much for the Maytag Centennial
5 washers?

6 MR. MARCHESE: Objection, asked and
7 answered.

8 THE WITNESS: You know, your question
9 has multiple parts to it, so I don't want to
10 answer that. I've given you my answer as to
11 what my assignment was, what I did, what my
12 opinions are. Your question asked me to make
13 some opinions that are not in my area of
14 expertise.

15 BY MS. McLAUGHLIN:

16 Q I'm asking you only whether you have an
17 expert opinion as to whether each class member paid
18 \$180 too much for their washing machine.

19 MR. MARCHESE: Are you stipulating
20 liability?

21 MS. McLAUGHLIN: No.

22 THE WITNESS: Again, as I just said,
23 you are asking a question that has some
24 assumptions. I'm not qualified to address
25 those assumptions. However, I am qualified in

1 giving you the answer that I just gave you.
2 And I know it's late and I don't want to sound
3 like I'm repetitive, but to make it brief,
4 44.3 percent or \$180.39 in my expert opinion,
5 is the price premium that the class members
6 buying these Maytag models, the price premium
7 apportioned to the price that they paid, the
8 \$407, on an average, based on all the retail
9 sales data that I've seen, and the conjoint
10 survey that I've done.

11 BY MS. McLAUGHLIN:

12 Q Are you familiar with Mr. Weir's expert
13 opinion in this case?

14 A I have looked at his report. But I'm
15 not an expert to comment on his report or provide
16 you with any details from his report.

17 Q What relationship does your survey have
18 to Mr. Weir's opinions?

19 A Now, I understand that he's used my
20 price premium in his report. Beyond that, I
21 wouldn't be able to comment on that question. That
22 is his report. He's an expert. He wrote it and I
23 think best to be asking him of that.

24 Q Have you ever offered an expert opinion
25 on damages before?

1 A My work has always been restricted to
2 conjoint survey, as an expert of that. I've already
3 given an opinion on damages calculations.

4 Q I just have a few more questions. Your
5 report mentions how you conducted a pretest of 25
6 respondents. What was the purpose of doing the
7 pretest?

8 A It's standard practice to have -- to
9 recruit a small set of respondents and have them
10 take the survey, and again expert moderators who
11 would allow them to take it -- ask them if they have
12 any questions about language, fill out the survey,
13 you know, see if there are any issues that need to
14 be addressed. It's a routine procedure that we do.
15 We'll typically do about half that number and then
16 my moderator would debrief me, if there were any
17 issues. In this case there were absolutely no
18 issues encountered. And the total of 25 was
19 completed. No issues encountered. And the survey
20 was then given a go ahead to launch.

21 Q So were you not debriefed, then, if
22 there were no issues?

23 A Well, I was debriefed about the halfway
24 about, like I said, about 12 surveys, and then I was
25 debriefed again at the end, and in both instances

1 there were no issues that were encountered. This
2 is, you know, as I said, ASEMAP has been used
3 extensively in a lot of different engagements that
4 I've done. I feel very confident that the process
5 that we followed from the focus groups, the review
6 of all the retail sales data, the review of all the
7 materials from Consumer Reports and so on in
8 designing the survey, designing the inputs is quite
9 robust and I was not expecting -- I did not
10 encounter any issues.

11 Q How did you select your pretest
12 participants?

13 A Again, pretest participants are not
14 giving you conclusive data. They're not giving you
15 actual data. So we would -- we would recruit them
16 very much with using the screener that you saw,
17 using the same process that we used for the focus
18 groups. It's likely that an independent facility
19 would have recruited these people, brought them in,
20 and my expert moderators would have completed the
21 test.

22 Q So you were not present for any of --
23 for the pretest?

24 A I typically -- it's a very standard
25 practice, we do it pretty much on every engagement

1 that we do inside the company. I don't participate
2 in that. I get debriefed by the moderator
3 conducting that, who lets me know if there were any
4 issues. And if there are no issues, they go to the
5 next phase, you know, the second half of the 25. If
6 there are no issues there, they debrief me that
7 there were no issues, and then we launch.

8 Q Is the moderator the same as the focus
9 group moderator or are these different people who
10 work for you?

11 A These are likely to be different
12 people. Because again, I don't remember the exact
13 person. They're all expert moderators. The people
14 who do pretest know exactly how to probe and get an
15 understanding for if there are any issues and
16 capture those.

17 Q So in your report you say that the
18 moderators completed the pretests according to
19 standard practices. What are standard practices?

20 A So standard practices would be recruit
21 these people, bring them into a facility, allow them
22 to start taking the survey, but give them
23 instructions such as, if you have -- if there's
24 language you don't understand, please raise your
25 hands, let us know. If the flow is something that

1 you don't feel comfortable, you know, raise your
2 hands, let us know what the issues are. Or if there
3 is a computer hiccup, let us know, but -- and then
4 there are probes in terms of, you know, are there
5 any issues. Because keep in mind that when we
6 launched the online survey these people are by
7 themselves taking it. So we want to mimic that, but
8 also give them an opportunity to respond, if there
9 are any issues.

10 Q And your report says the moderators
11 routinely interrogated the participants. At what
12 point were they interrogated?

13 A These are expert moderators. They do a
14 lot of focus groups. Literally every engagement we
15 do these focus groups -- I'm sorry, these pretests.

16 Q Pretest.

17 A I apologize. I want to correct that.
18 It's probably getting to the end of the day.

19 Q Yes.

20 A But it's -- the procedures would be
21 that they would let the participant come in. They
22 would debrief them on the fact that we're asking
23 them to take the surveys, that if they have any
24 issues or concerns to raise your hand. And then in
25 the process, somewhere around five or ten minutes

1 down the road, they may ask them again the question,
2 is there anything you didn't understand, is there
3 anything you would like to let us know, and then
4 they'd go on to having them complete the next few
5 aspects of the survey, and they might ask them again
6 one more time. So one of the things we don't want
7 to do is we don't want to inject every time because
8 keep in mind when this goes online by itself there's
9 not a moderator telling them what to do. So we want
10 them to take it, simulate what they would do
11 outside, but at the same time be able to provide any
12 feedback if there are any issues that they encounter
13 either in the language or the flow.

14 Q Do they question them then at the end
15 after the survey is complete?

16 A They would probe to see if there was
17 anything that was an issue. And in this case, there
18 were no issues at the end of 12 surveys, 12 pretests
19 and then again at the end of 25, the moderators
20 called me up and said that there were no issues.
21 Given our experience and expertise in running these
22 surveys we didn't encounter any issues.

23 Q Did the moderator take any notes during
24 these interrogations or after these interrogations?

25 A No. They didn't take any notes.

1 Partly, I guess, was driven by the fact that they
2 didn't see anything. They are doing this routinely
3 with a lot of our surveys. They didn't see any
4 issues. They just called me, debriefed me, and said
5 there were no issues.

6 Q Did you take any notes from your
7 debriefing?

8 A There were no issues, there was nothing
9 to take a note of.

10 Q So the answer is no?

11 A No.

12 MS. McLAUGHLIN: I have no further
13 questions.

14 MR. MARCHESE: I will have a few
15 questions.

16 First I'd like to just reserve the
17 witness' right to review and sign the
18 transcript.

19 BY MR. MARCHESE:

20 Q Good afternoon, Dr. Sukumar.

21 A Good afternoon, Joe.

22 Q So you conducted a survey for a
23 conjoint analysis in this case, right?

24 A That's correct.

25 Q Do you know what portion of your survey

1 respondents resided in the seven states for which
2 class certification is being sought, specifically
3 the states of New Jersey, California, Florida,
4 Indiana, Ohio, Texas and Virginia?

5 A So, as I mentioned this morning, that
6 we did have survey respondents from all of the 50
7 states, and the seven states that you just read out
8 are reflective of all the different parts of the
9 country, and it made sense as a result to go in that
10 way. More importantly, as I'm thinking back, and
11 again I don't have an exact number, but about half
12 of the respondents in -- the data is available,
13 about half of the respondents I would say would be
14 from those seven states.

15 Q So about 50 percent of the respondents
16 were from the seven states at issue?

17 A I would say approximately. You know,
18 the exact numbers, again, I'm going back to memory,
19 and initially I had a bit of a memory lapse and I
20 thought through it again, and I remember the
21 analysis that I did; and yes, it's about half.

22 Q In your opinion, is 50 percent a
23 substantial portion of the universe of survey
24 respondents?

25 MS. McLAUGHLIN: Object to form.

1 THE WITNESS: Well, if you look at the
2 sample that we have here, it's a fairly large
3 sample. It's about 500-and-odd, and about
4 50 percent of that is a sizeable sample to
5 cover those specific states.

6 BY MR. MARCHESE:

7 Q Were you finished with your answer?

8 A I was just going to say, in my expert
9 opinion, that's a very reasonable sample to have.

10 Q So are the survey respondents from your
11 conjoint survey representative of the class members
12 from the states at issue in this case?

13 A In my expert opinion, I would say that
14 the survey respondents are represented --
15 representative of the class members. We did not
16 make any efforts to exclude any class members.

17 Q Is the price premium that you
18 calculated from your conjoint survey applicable to
19 the class members from the seven states at issue in
20 this case?

21 A Absolutely.

22 Q You haven't seen any evidence to the
23 contrary, right?

24 A I haven't seen any evidence to the
25 contrary.

1 MS. McLAUGHLIN: Object to form.

2 BY MR. MARCHESE:

3 Q Do you have your report handy? I think
4 it was marked as Exhibit 1 earlier. Could you turn
5 to page 5, please, of your report? Do you have
6 that?

7 A Yes, I'm on page 5.

8 Q And do you see there in the third full
9 paragraph on page 5 the sentence that reads, By
10 comparing the value difference between two levels of
11 ENERGY STAR to the value difference between prices
12 of \$300 and \$500 I am able to determine the price
13 premium, if any, attributable to the ENERGY STAR
14 logo?

15 Do you see that?

16 A Yes, I do.

17 Q Why did you use the price range of \$300
18 to \$500?

19 A Well, if you read the sentence right
20 after that, it says, the 300 to \$500 price range has
21 been used because this really encompasses the prices
22 that customers actually paid for the Maytag models,
23 washing machines at issue. And so it was really
24 based on the retail sales data. If you remember, we
25 talked about the retail sales data from Fry's,

1 Lowe's, Home Depot and Sears. It encompasses that,
2 based on all that data that was used.

3 Q And did you incorporate that price
4 range from the retail sales data into your design
5 for your conjoint survey?

6 MS. McLAUGHLIN: Object to form.

7 MR. MARCHESE: What's the objection to
8 form there? I asked him did he.

9 MS. McLAUGHLIN: The basis for it, it
10 was speculation.

11 MR. MARCHESE: Can you read my question
12 back to the witness, please?

13 (At which time the following question
14 was read back by the reporter:

15 "Question: And did you incorporate
16 that price range from the retail sales data
17 into your design for your conjoint survey?")

18 BY MR. MARCHESE:

19 Q You can answer the question.

20 A Yes, because you can see that the
21 levels we tested are, you know, taking into account
22 those ranges, and the price premium is calculated
23 using the average price for -- from the retail sales
24 data during that period.

25 Q Could you please turn to page 7 of your

1 report? Do you have that?

2 A Yes, I do.

3 Q Do you see the sentence, the second
4 sentence in Section D which reads, My recommended
5 estimate for price premium for the ENERGY STAR logo
6 is \$180.39 (44.3 percent of the average clothes
7 washing machine price of \$406.99) as shown in row 3
8 of Exhibit 5.

9 Do you see that?

10 A Yes, I do.

11 Q Why did you list out your estimate for
12 the price premium for the ENERGY STAR logo in
13 dollars and as a percentage of the average clothes
14 washing machine price of \$406.99?

15 A Well, you know, we tested a range of
16 prices, so clearly 44.3 percent is as a function of
17 the Maytag model. The average price of the Maytag
18 model is \$406.99. So if the price were \$500 is, I
19 think, if I recall correctly, some of the models may
20 have been more expensive. So if you look at it in
21 that fashion that percentage can be applied to that
22 range.

23 Q And so you could use the percentage for
24 the price premium estimate for the ENERGY STAR logo
25 to the washing machines at issue in this case which

1 were sold across the range from the \$300 to \$500?

2 A That's correct.

3 MR. MARCHESE: I have no further
4 questions.

5 MS. McLAUGHLIN: I have one question.

6 BY MS. McLAUGHLIN:

7 Q So is it now your testimony that your
8 price premium is either \$180 or 44.3 percent in
9 either as an absolute dollar amount or a percentage?

10 MR. MARCHESE: Objection to form.

11 THE WITNESS: Again, I've always said
12 that the \$180.39 and the 44.3 percent reflect
13 the price premium, so the 44.3 percent is
14 being calculated based on the average retail
15 price that I took into account. So that
16 percentage can be applied to the range of 300
17 to \$500.

18 BY MS. McLAUGHLIN:

19 Q I thought you said earlier today when I
20 said -- I asked is \$180 the price premium for a
21 washer that sold at \$300 and you said, yes, it is.
22 Are you now saying that the price premium is
23 44.3 percent for a washing machine that would sell
24 at retail for \$300?

25 A So if you -- if you think through, you

1 know, this percentage, the \$180.39 is a percentage
2 of the average price. So that percentage can be
3 applied to the entire range from \$300 to \$500. I
4 think I mentioned that earlier as well. And yes,
5 that's what I mean.

6 Q So your opinion is that the price
7 premium is now either \$180 or 44.3 percent?

8 MR. MARCHESE: Objection to form.

9 THE WITNESS: The answer is yes,
10 because again the \$180.39 on the price of
11 \$406.99 reflects that 44.3 percent.

12 MS. McLAUGHLIN: I have no further
13 questions.

14 VIDEO OPERATOR: Going off the record,
15 6:37 p.m. This is the end of disc 7 and
16 concludes the deposition of Dr. Sukumar.
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C E R T I F I C A T I O N

I, LISA FORLANO, a Certified Realtime Reporter, Certified Court Reporter and Notary Public, do hereby certify that I reported the deposition in the above-captioned matter, that the said witness was duly sworn by me; that the foregoing is a true and correct transcript of the stenographic notes of testimony taken by me in the above-captioned matter.

I further certify that I am not an attorney or counsel for any of the parties, not a relative or employee of any attorney or counsel connected with the action, nor financially interested in the action.

LISA FORLANO, CRR, CCR #XI01143

DATED: March 21, 2016

800-567-8658

WITNESS' NAME: Ramamirtham Sukumar

MY COMMISSION EXPIRES

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Livingston, New Jersey 07039
Toll Free: 800-227-8440 Fax: 973-629-1287

_____, 2016

To: Joseph Marchese, Esq.
Case Name: Dzielak, Et Al. v. Whirlpool Corporation
Veritext Reference Number: 2236904
Witness: Ramamirtham Sukumar Deposition Date: 3/17/2016

Dear Sir/Madam:

Enclosed please find a deposition transcript. Please have the witness review the transcript and note any changes or corrections on the included errata sheet, indicating the page, line number, change, and the reason for the change. Have the witness' signature at the bottom of the sheet notarized except in California where they are signing under penalty of perjury and forward the errata sheet back to us at the address shown above.

If the jurat is not returned within thirty days of your receipt of this letter, the reading and signing will be deemed waived.

Sincerely,

Production Department

Encl.

cc: Allison R. McLaughlin, Esq.

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF SEPTEMBER 1, 2014. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

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